

# **PROFESSIONAL CV**

### OF

# MO M. JAMSHIDI, Ph.D., DEng. (h.c.)

Fellow-Institute of Electrical and Electronic Engineers Fellow-American Society of Mechanical Engineers Fellow-American Association for the Advancement of Science Associate Fellow-American Institute for Aeronautics and Astronautics Fellow-New York Academy of Science Fellow-TWAS (The World Academy of Sciences) Foreign Member Hungarian Academy of Engineering Foreign Member Russian Academy of Nonlinear Sciences Work Phone: 1 210 458 7074 Work Fax: 1 210 458 5947 Private Fax: 1 210 479 1048 Emails: <u>moj@wacong.org, mo.jamshidi@utsa.edu</u> Revised in December 2014

#### **PRESENT POSITIONS:**

- Lutcher Brow Endowed Distinguished Chair, Department of Electrical and Computer Engineering, University of Texas, San Antonio, TX, USA (University of Texas System Position)
- Member, Chancellor's Council, University of Texas System, Austin, TX, 2012-
- Honorary Professor University of Birmingham, UK, 2012-2017.
- Visiting Professor, Loughbrough University, Loughbrough, UK, 2014-2017.
- Founding Director, Center of Autonomous Control Engineering ACE, 1995-present (UNM 1995-2006, ACE Laboratory UTSA 2006-present).
- Regents Professor Emeritus of Electrical and Computer Engineering, University of New Mexico, Albuquerque, NM USA, 2006- present.
- AT&T Professor Emeritus of Manufacturing Engineering, University of New Mexico, Albuquerque, NM USA, 1989-present.

- General Chairman, World Automation Congress and former ISRAM International Symposium on Robotics and Manufacturing (<u>http://wacong.org</u>), 1986- present
- Honorary Professor, Deakin University, Australia, 2010-2014
- Honorary Professor, University of Birmingham, UK, 2012-2017
- Honorary Professor, Obuda University, Hungary, 2012-

## **MANAGEMENT POSITIONS:**

- Director, Autonomous Control Engineering Laboratory, University of Texas, San Antonio, 2006-present (supervising 20 students and 1 staff)
- Founding Director, International Consortium on System of Systems Engineering (icsos.org), 2006-present, an industry-academia partnership at global level with close collaboration with Governments and Military, run as a not-for-profit corporation on campus of University of Texas, San Antonio.
- Founding Director, NASA Autonomous Control Engineering Center, University of New Mexico, Albuquerque, NM, 1995-2006, (supervising 35 students and staff, annual expenditure ~ \$ 2 ML)
- Founding Chair, Establishing Committee of Manufacturing Engineering Program, University of New Mexico, Albuquerque, NM, 1986-88, currently with a \$ 2 ML per year budget and with 2 accredited degree programs.
- Director, CAD Laboratory, University of New Mexico, Albuquerque, NM, 1984-1995.
- Director, University Computing Center, Pahlavi University, Shiraz, IR, 1973-1975. Upgraded and established 2 generations of IBM mainframe computers with responsibilities for all University affairs on the computer (payroll, academic affairs, libraries, purchasing, etc.)
- Director, Hybrid Computing Laboratory, L, University of Illinois at Urbana-Champaign, IL, 1970-1971
- Founding Chairman and Founding Editor of 4 conferences, 2 congresses and 3 journals, including the <u>IEEE Control Systems Magazine</u> (1980-1984) and <u>IEEE Systems Journal</u> (2006 2012) and Annual IEEE International Conference on System of Systems Engineering since 2006.
- Founding Co-Editor-in-Chief, *Int. Journal on Automation and Control*, Inter-Sciences, London, 2006 present.
- Editor-in-Chief, *Intelligent Automation and Soft Computing Journal* (USA), 2002- present, published by Taylor & Francis Group LLC, UK.

# **OTHER MAJOR ACTIVITIES:**

- Co-Founder, TSI Enterprises, Inc., Albuquerque, NM USA (<u>http://wacong.org/tsi</u>), established in 1980, specializing in educational tools, publishing and conference management.
- Founding Director, University of New Mexico CAD Laboratory for Intelligent and Robotic Systems, 1984 1995.

- Co-Founder, Students Scholarship Fund, Inc., of Albuquerque, NM USA (a US IRS 501C non-profit Corporation, co-founder: Lotfi A. Zadeh) Specializing in raising funds for needy graduate students in science and engineering around the world. (<u>http://wacong.org</u>)
- Editor-in-Chief, *International Journal of Computers and Electrical Engineering*, Elsevier, UK (1989 2009)
- Editor-in-Chief, *International Journal of Intelligent Automation and Soft Computing*, TSI Press, US (2002 -- present)
- Co-Editor-in-Chief, *International Journal of Control and Automation*, InterScience Publishers, England (2006-present)
- Founding Editor-in-Chief, *IEEE Systems Journal*, 2006-present (systemsjounral.org)
- General Chairman, IEEE International Conference on Systems, Man and Cybernetics, Big Island, Hawaii, USA, Oct. 10-12, 2005 (<u>http://ieeesmc2005.unm.edu</u>).
- Vice President, IEEE Systems, Man and Cybernetics Society, 2003-2006.
- Board member, IEEE Systems, Man and Cybernetics Society, 2006-2008
- Board member, IEEE Systems Council, 2006- 2012.

#### **IMMIGRATION STATUS:**

US Citizen since 1992.

#### **DATE OF BIRTH:**

May 10, 1944

#### **EXECUTIVE SUMMARY:**

Major Contributions: Jamshidi has a recognized record of engineering contributions in modeling, optimization, CAD & control of large-scale systems - LSS. Seeds of his work were planted with his graduate research at the University of Illinois. In 1969 at Illinois, he formalized an approach to modeling, model reduction & optimal control of LSS. Exploiting plant parameter variations, multi time-scale nature and plant variables sensitivity with respect to parameters of physically hybrid systems, e.g. electro-mechanical (later applied it to electro-optics, electro-hydraulic, robots, mechatronics, etc.), he formalized a systematic multi-stage design approach making control of LSS possible. He cemented this approach 14 years later with the publication of his seminal book on LSS, known as the "First Textbook" of the field. By then he extended the approach to time-delay, bilinear, stochastic & discretetime systems. This book was translated into 5 languages and adopted in over 55 nations and is still being used as a text. Since 2006 he has concentrated on the extensions of LSS to System of Systems Engineering (SoSE) in theory and applications to national and homeland security, renewable energy, and robotic swarms in the air (UAVs), sea (submarines) and land rovers. He has 68 books (12 textbooks) in print and another 680 published works. His latest books are on SoSE subject.

Mo Jamshidi has had over 46 years of engineering career spanning from academics in US and overseas, US Government service (28 years, part-time) to work in the industry (USA and France, for a combined period of 4 years) on to entrepreneurship and philanthropic efforts at international level. In technical research and development he has contributed globally to the field of large-scale complex systems and system of systems and their applications and

integration with various control and modeling paradigms, including intermixing control theory and intelligent paradigms of artificial intelligence, which is known as autonomous control.

As an engineering academician, he has graduated 45+ Ph.D. and 60 + MS students and has supported and overseen the graduate education of an additional 60 students at the ACE Center through NASA-funded grants and agreements. Among these 120 graduate degrees he has advised or mentored about 54 (45%) are from America's ethnic minorities. In addition, he helped create an undergraduate research program, called PURSUE (Performing University Research for Students in the Undergraduate Education, <u>http://pursue.unm.edu</u>) which has mentored over 850 additional undergraduate students on another NASA supported contract at the University of New Mexico and partnership with high schools, 2- and 4-year colleges and universities. He has over 700 publications, which includes 68 books and edited volumes. His funded research amounts to approximately US \$ 20.2 ML in a span of 25 years.

### MAJOR ACTIVITIES FOR US GOVERNMENT AND MILITARY:

Mo Jamshidi has been active for US Government in many major programs for nearly 27 years:

- 1. Researcher at US Air Force Research (formerly Weapons or Phillips) Laboratory (1984-90), working on Model-Reference Adaptive Optics for the Strategic Defense Initiative (SDI), Kirtland AFB, NM, USA. This work was later considered for the first generation adaptive optics on the Hubble Telescope. A second tour work was done on diagnostics and prognostics of Airborne Laser (ABL) systems at AFRL (2003-2005).
- 2. Consultant with Department of Energy Oak Ridge National Laboratory, Oak Ridge, TN. Work was done on modeling, decentralized and adaptive control strategies of next generation nuclear breeder reactors, calibrated at Idaho National Laboratories.
- 3. Member of NASA JPL Advisory Committee on the Mars Pathfinder Project, 1992-1995. As Advisor to this program, he proposed behavior-based control strategies for the rover on the Mars surface.
- 4. Founded the Center for Autonomous Control Engineering (ACE) in 1995 with a Cooperative Agreement from NASA Code EU. To date the ACE Center under his leadership and support has graduated 65 minority MS and 18 minority Ph.D. students.
  - In February 1997 he organized the inaugural NASA University Research Centers Technical Conference (URC\_TC 97) in which the Honorable Dan Goldin the former NASA Administrator and the Honorable Pete Dominica the then US Senate ranking member of the Senate Budget Committee were the two Honorary Co-Chairs. Over 400 scientists and technologists and managers attended this 3-day meeting. This conference was a cornerstone in making a statement on the quality of USA's Minority Institutions Research in Science and Technology. The NASA Administrator called the meeting a "*knockout*". The Honorable NASA Administrator took the book and CD ROM Proceedings of this meeting to the floor of the US Senate.
  - He was a member of the review committee for NASA's Review Board for Planetary Surface Systems. In this capacity, he helped direct NASA's future R&D efforts on

the autonomy in space, through autonomous and semi-autonomous unmanned missions, 1999-2001.

- 5. Asides from Oak Ridge National Laboratory, he has consulted with DOE Los Alamos National Laboratory and Sandi National Laboratories and DOE Headquarters Office of Renewable and Energy Efficiency for 6 years in the span of 1988 till 2004.
- 6. From 1997 to 2003 he was a member of the NASA HQ minority businesses utilization (MBRAC) Board, overlooking all the contracting relations between minority and womenowned businesses and Prime contractors NASA-wide. He represented a Hispanic serving institution on the Board. The Board advised NASA on close to \$1.4 BL program.
- 7. During 2001-2003 he led a national team on the applications of robotics for energy efficiency of 10 US "Industries of the Future," for DOE HQ. His report is now on DOE Web site (<u>http://www.eere.energy.gov/ industry/sensors automation/tools.html</u>). Summary of his study will be part of the Call for Proposals: at DOE HQ.

# MAJOR TECHNICAL CONTRIBUTIONS AND PATENTS:

Mo Jamshidi is known around the world for many scientific and technical contributions, especially for his pioneering works on Large-Scale Systems - Modeling, Computation, Computer-Aided Design, Optimization and Applications. Currently he is expanding his 30-year experience on complex systems in the realm of "*System of Systems*" Engineering with applications in energy systems, national security, healthcare and private enterprises. Among past and present achievements are the following:

- 1. He helped develop an environmental-economic dispatch of electric power systems methodology for coal-fired power plants in 1976 at IBM T. J. Watson Research Center, Yorktown Heights, NY. His approach is being used by many utilities (including the TVA) to avoid air pollution while meeting the power demand. The approach is a major research trend of EPRI - Electric Power Research Institute.
- 2. He helped design adaptive control architecture for multi-aperture telescope systems at US Air Force Phillips Laboratory as an IPA (Inter-Personnel Act) Professor. His approach was patented at US Air Force and the approach was used to reconstruct images for the Humble Telescope Project and Strategic Defense Initiative.
- 3. He helped create a fuzzy logic PI controller for environmentally friendly refrigeration systems and transferred the technology to a small New Mexico Company. The units are now being manufactured and sold nationwide.
- 4. He has guided and now receiving a US Patent (# 5,590,246) for a fuzzy logic video printer for creating quality prints from video. The technology is now producing two commercial products SmartPhotoLab© (http://ace.unm.edu/spl) and SmartPhotoCard© for color image printing from the Internet or other sources as well as enhancing the quality of color film printing.
- 5. He published a book on large-scale systems in 1983 and its revised new edition in 1997, which was translated in 4 languages and used in all continents, and over 55 countries have used it as a textbook in 5 languages.
- 6. He has graduated 48+ Ph.D. and 52+ MS electrical, mechanical and computer engineering students and has supported and overseen the graduation of an additional 83 Ph.D. and MS students from America's Ethnic Minorities. Over 45% of Mo Jamshidi's MS and Ph.D.

students have been members of USA's ethnic minorities. He initiated an innovative student research/teaching teaming concept, called the VI-P<sup>®</sup> Model (Vertically Integrated Projects, http://ace.unm.edu), which is now a nationally recognized and adopted by numerous institutions in the United States.

- 7. He chaired the New Mexico Statewide and City-Industry-level committee to establish the Manufacturing Engineering Program and the University of New Mexico with fiber optics links to a sister university - New Mexico State University and the subsequent Master of Manufacturing Engineering Degree, 1985-87. The program has now graduated many MEng. Students and now has a multi-million dollar research and training center, headed by a colleague hired in early 1990's. This program led to a major grant from AT&T, when Jamshidi was designated as the AT&T Professor of Manufacturing Engineering in 1989.
- 8. In 1984, he spent several months at GM Technology Center, Warren, MI working on modeling and control paradigms of a new car engine. The engine later on was the one chosen for GM's new Saturn Sedans.
- 9. Currently, he has 3 more pending patents on:
  - a. MRI Images clustering and pattern recognition and
  - b. A new neuro-fuzzy clustering approach to satellite imagery and applications in remote sensing, medicine, etc.
  - c. EduDemia a social network for academic community

# MEDIA AND PRESS COVERAGES:

- WOAI (NBC) ... November, 2006; KSAT (ABC) December 2006; PBS (all 13 Texas stations and all Texas Senior High Schools coverage), throughout 2007-2008; FOX News (San Antonio and Houston) November 2007; FOX News January 2008; KSAT (ABC) January 2008: KENS (CBS) May 2008 (Great Day SA, live show)
- His contributions to America's Ethnic Minority education has been covered in national magazines like <u>Outlook on Hispanic Education</u> (2002, 2006) and many newspapers in NM and TX.
- His research work has been on local and regional TVs, and radios including ABC, CBS, FOX, NBC, and PBS in New Mexico.
- He has been covered in many Newspapers and TV and radio programs in foreign countries like New Zealand, Australia, United Arab Emirates, Iran, Bahrain, Saudi Arabia, South Africa, Tunisia, etc.
- Jamshidi was a guest on Peggy Smedley Radio Show (Chicago, IL) on October 21, 2014 (http://ace.wacong.org/media/segment2102114.mp3)

# **COMMUNITY SERVICE**

Mo Jamshidi has consistently served the community around him both in New Mexico (1979-2006) and Texas (2006-present). In New Mexico he directed a multi-million dollars University Center, called NASA Autonomous Control Engineering (ACE) Center for 8 years focusing on Ethnic minorities from K-12 till Ph.D. He has directly or indirectly been responsible of graduating 90 MS and 25 PhD graduates among US Minorities: Hispanics, African Americans, Native Americans, and Pacific Islanders. Among these students and sample of their current positions are: Scientist a

Applied Physical Lab at John Hopkins, Professor at GA Tech, Deputy Scientist at US Air Force Research Laboratory, Arizona State, UTEP, etc.

He has always have opened his research laboratory (UNM and UTSA) to K-12 and students at all levels of colleges and community colleges. At UTSA, his ACE Laboratory, which has so far graduated 13 PhD and 20 MS students, many ethnic minorities. He and his graduate students have visited many San Antonio High Schools like St Mary's Hall, Jefferson High, etc. Jamshidi initiated the construction of a Solar Car by Jefferson HS students and brought it to Texas Sustainable Energy Institute (TSERI) for financial support. That car was featured during the visit of San Antonio Mayor Julian Castro and President Ricardo Romo. Since 2006 hundreds of K-12 students from SA and Austin have UTSA ACE Lab.

Since his arrival year in 2006, Jamshidi and his students have initiated and now well established an annual UTSA Students Conference from 4 colleges (Architecture, Business, Engineering and Scien ce). These conferences have attracted speakers from Industry, SwRI, Austin Solar, Rackspace, etc. and papers presentations from local high schools.

Jamshidi's students have built 7 mobile rovers for UTSA iTEC program and have taken part in robotic camps and K-12 competitions.

On November 22, 2014 Jamshidi and 4 of his graduate students were at San Antonio Children's Museum demonstrating 3 o four quadcopters and worked for 4 hours with SA children and their parents, see

https://onedrive.live.com/redir?resid=34C39A547902D0FC!4738&authkey=!AGejONZj6Ah7jt0& ithint=folder%2cjpg.. "Thanks very much to Dr. Mo Jamshidi and the grad students from ACE Laboratory at the UTSA College of Engineering, for demonstrating multi-quadcopters flights and exciting so many children," Chris Navarro, Public Programs and Community Partnership Manger, SA Children's Museum .Prelude to this event UTSA ACE Student Patrick Benavidez was featured on SA Live SAT show on November 18, 2014. See link

https://onedrive.live.com/?cid=34c39a547902d0fc&id=34C39A547902D0FC%214708&ithint=vid eo,mp4&authkey=!ABtsb2TbSZL7Hx4

Institution Name and Address	Date(s)	Degree/Program
Queens College, Flushing, NY	2/63-6/63	English Proficiency
Oregon State University, Corvallis, OR	9/63-6/67	BS Electrical Engr.
University of Illinois, Champaign-Urbana, IL	9/67-6/69	MS Electrical Engr.
University of Illinois, Champaign-Urbana, IL	6/69-2/71	Ph.D. Electrical Engr.
IBM Watson Research Center, Yorktown	9/75-4/77	Post-Doctoral Fellowship

# **EDUCATION AND DEGREES:**

Heights, NY		
Odlar Yourdu University, Baku, Azerbaijan	12/1998	Honorary Doctorate degree
University of Waterloo, Waterloo, Canada	6/2004	Hon Doc of Engr. degree
Technical University of Crete, Greece	12/2004	Honorary Doctorate degree

# WORK EXPERIENCE:

Employer	Duration	Position	Accomplishments
Cardiff University, Wales, UK	2009-2010	Distinguished UK Royal Academy of Engineering Fellow	System of Systems Lecture Series in UK and N. Ireland
Universidad de Politecnic de Madrid, Spain	Summer 2008	Distinguished Visiting Professor of UPM	System of Systems Lectures and Workshop at UPM
Univ. of Texas San Antonio, TX	2006- present	Lutcher Brown Endowed Chair, Electrical & Comp Engr.	Research & Education on Cyber-Physical Systems applications to Robotics and Sustainable Energy
Univ. New Mexico	2006- present	Regents Professor Emeritus	Research & Education
Univ. New Mexico	2000-2006	Regents Professor	Research, Education , Control, Modeling, and Applications of Large- scale Systems
Hong Kong Poly. Univ.	2/2002- 3/2002	Visiting Professor	Research & Education
Singapore Nat. Univ.	3/2002	Visiting Prof.	Research & Education
NATO	Summer 1999	Distinguished NATO Professor	Lecture Series in Portugal in Machine Intelligence
Univ. New Mexico	1995-2006	Director ACE Center	Executive & Managerial
CNRS, Toulouse	8/94-7/95	Directur de Recherch	Research & Education

(French NSF)		Assoc. du CNRS	
Siemens Automotive Toulouse, France	12/94-5/95	Consultant	Intelligent Auto Mechanisms and Accessories
NASA, JPL & HQ	4/92-12/95 2/98-12/03	Advisor & Special Gov. Employee	Mars Pathfinder Mission & Min. Business-Prime Relations (MBRAC)
USAF Research Laboratory	4/88-2/90 10/201- Present	Senior Research Advisor	Work on Adaptive optics Diagnostics & Prognostics
Oak Ridge National Lab.	7/88-2/92	Consulting & Training	Large-Scale Complex Systems
Univ. Virginia	1/88-6/88	Visiting Professor	Robotics Training
George Washington Univ.	8/87-6/88	Dist. Visiting Professor	Research & Education
IBM Inf. Prod. Div Boulder, CO	5/82-8/83	Advisory Engr. & Consultant	Copiers Print head Electronics analysis
GM Tech Center Warren, MI	5/84-8/84	Visiting Scientist	Research & Training
IBM Inf. Prod. Div Boulder, CO	5/82-8/83	Advisory Engr. & Consultant	Copiers Print head Electronics analysis
Univ. New Mexico Albuquerque, NM	8/79-5/80	Visiting Professor	Research & Education
Shiraz University Shiraz, Iran	7/77-7/79	Professor of EE	Research & Education
Tech Univ. Denmark Lyngby, DK	4/77-7/77	Chaired Professor of Energy Systems	Research & Education
IBM Watson Res Ctr.	9/75-4/77	IBM World Trade Fellow	Environmental & Water Resources Res.

Yorktown Heights, NY			
University of Stuttgart Stuttgart, Germany	6/75-9/75	DAAD Professor of System Engr.	Research & Education
Shiraz University	9/71-6/75	Assist. & Assoc.	Research &
Shiraz, Iran		Professor of EE	Education
University of Illinois	1/71-9/71	Research Associate	Research
Urbana, IL		(Postdoctoral fellow)	Administration

### PROFESSIONAL SOCIETIES, AWARDS, HONORS AND ACADEMIES MEMBERSHIPS:

- Fellow, IEEE (for contributions to large-scale systems and applications), 1989
- Fellow ASME (for contributions to robotic and manufacturing systems), 1999.
- Fellow, AAAS American Association for the Advancement of Science (for contributions to complex systems control and optimization), 1998.
- Fellow, TWAS Developing World Academy of Sciences, 1995.
- Foreign member, Hungarian Academy of Engineering (for contributions to computer-aided control of Large-scale systems design), 1999.
- Fellow, New York Academy of Sciences, 2004
- Honorary Professor, Deakin University, Australia, 2006-2008
- Member, Russian Academy of Nonlinear Sciences, 2000
- Honorary Chaired Professor, Deakin University, Deakin, Vic., Australia, 2001 and 2009present
- Honorary Doctor of Science, Odlar Yourdu University, Baku, AZR, 1998
- Honorary Doctor of Engineering, University of Waterloo, Canada, 2004
- Honorary Doctor of Engineering, Technical University of Crete, Greece, 2004
- Winner, College of Engineering Outstanding Researcher of the Year, UNM, 1993.
- Member "US National Academy of Science's NRC Comm. on Manufacturing Engr.
- US National Academy of Engineering Task Force on Aeronautical Engineering
- US National Research Council Review Board DOE and Ford Foundation, 2001-2009
- Member IFAC Group on Large-Scale Systems
- Member Numerous IFAC and other Conferences and Symposia Program Committees
- Winner four years of tuition scholarship at Oregon State University -1963-67
- Winner of General Electric College Bowl Scholarship Oregon State Univ.- 1966-67
- Winner, full fellowship, University of Michigan 1969 (not used)
- Eta Kappa Nu Electrical Engineering Outstanding Sophomore 1965
- Phi Kappa Phi Junior Honor Student 1966
- Member Eta Kappa Nu Electrical Engineering Honor Society 1966
- Member Tau Beta Pi Engineering Honor Society 1966
- Member Sigma Tau Engineering Honor Society 1966
- Member Phi Kappa Phi General Scholarship Honor Society 1967,

- Member Sigma Xi Scientific Research Society 1980
- Recipient IEEE CENTENNIAL Medal 1984
- Recipient IEEE Control Systems Society Distinguished Member Award 1985
- IEEE Control Systems Society MILLANEUM award, 2000
- Honorary Chaired Professor, Nanjing Aeronautical University Nanjing, P. R. China
- Honorary Chaired Professor, Xia'n Institute of Technology Xia'n. P. R. China
- Honorary Chaired Professor, East China Industrial Institute, Nanjing, P. R. China
- NASA Public Service Award "In recognition to your contributions to America's Space program through your dedicated service as a member of NASA Minority Business Resources Advisory Committee from 1999 to 2003", 2004.
- IEEE Norbert Weiner Distinguished Research Award, 2005
- IEEE SMC Society Distinguished Contribution Award, 2006
- Awarded as a Distinguished Alumni in Engineering at Oregon State University (<u>http://engr.oregonstate.edu/oregonstater/2006/MohammadJamshidi.html</u>) in 2006.
- The Royal Academy of Engineering Distinguished Visiting Research Fellow, UK, Summer 2009
- Member, Fellowship Review Board, US-Vietnam Education Foundation, 2009-present
- Member, Department of Defense Committee on System of Systems Engineering, 2009present
- UK Royal Academy of engineering Distinguished Fellow, Cardiff University, Cardiff, Wales, UK, 2009-2010
- Best Paper Award (1<sup>st</sup> Place) IEEE Systems Conference, San Diego, CA, April 2010.
- Best Paper Awards (1<sup>st</sup> place) and (2<sup>nd</sup> Place) in 2 tracks of WAC 2010, Kobe, Japan.
- Vice Chair, IFAC Technical Committee on Large-Scale Systems, 2010-
- Council member of University of Texas System's Chancellor, Austin, TX, USA
- Honorary Professor, University of Birmingham, UK, 2011-present.
- Honorary Professor, Obuda University, Budapest, Hungary, 2012-present.
- Presidential Award for Advancing Globalization of Institution, UTSA, TX, 2012
- Advisor, LABoratory EXcellence (LABEX) national French program on system of systems, 2012-current
- Received Best Contribution Award from IEEE Systems Council, April 2013.
- Received Career Contribution Award from IEEE-USA in New York, May 17, 2014
- Invited Member of International Advisory Board of European Cyber-Physical Systems network SOCIALCPS, March 2014 (<u>http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/calls/h202</u> <u>0-ict-2014-1.html</u>)
- Visiting Professor of Systems Engineering, Loughbrough University, UK, 2014-17.
- IEEE-USA Career Award in Systems Engineering, NY, NY, May 2014 http://engineering2.utsa.edu/index.php/uncategorized/jamshidi-recieves-a-2013-ieee-usa-award/
- University of Texas at San Antonio College of Engineering Best Researcher Award, 2014
- Honoree of WAC 2014, Winner WAC Medal of Honor for outstanding contributions to systems engineering and ethnic American education, <u>http://wacong.org</u>

# EDUCATIONAL PROGRAM DEVELOPMENT, TEACHING, AND NEW COURSES:

• M. Jamshidi has been teaching for over 34 years.

- He helped establish an undergraduate program on Computer Science and Engineering program in 1973 at Shiraz (formerly Pahlavi) University, Shiraz, Iran.
- From 1984 to 1986, he was the chair of the Manufacturing Engineering MS Program at the University of New Mexico, collaborating with New Mexico State University (Las Cruces, NM) when he helped create MS in Manufacturing Engineering. Today, that program has had many graduates and is affiliated to a center called MTTC Manufacturing Technology Training Center, with multi-million dollars funding, headed by a colleague from Mechanical Engineering Department with 2 accredited degree programs.
- He has taught the following courses during his tenure:
  - 1. Electric circuits and networks
  - 2. Numerical Analysis
  - 3. Computer programming languages
  - 4. Classical control systems
  - 5. Digital control systems
  - 6. Optimization techniques
  - 7. Optimal control systems
  - 8. Large-scale systems
  - 9. Robotics From Fundamentals to advance topics
  - 10. Computer-aided Robotics
  - 11. Computer-aided design of control systems
  - 12. Fuzzy logic and engineering applications
  - 13. Intelligent control systems
  - 14. Intelligent systems
  - 15. Artificial Intelligence
  - 16. Linear systems
  - 17. Advanced Fuzzy Logic Control Systems
  - 18. Modern Control Systems
  - 19. Autonomous Control Systems
  - 20. System of Systems Engineering
  - 21. Intelligent System of Systems Engineering
  - 22. Networked Control Systems
  - 23. Sustainable Energy Systems
  - 24. Big Data Analytic and Open Cloud Computing

**STUDENTS EVALUATION** - His students' evaluation mark, when applicable in his career at UNM, has been within the range of 4.9 to 6.0 (out of 6.0). His teaching effectiveness has gained him three honorable mentions from the students associations and printed in the University's Daily Students Newspaper Daily Lobo. Many times, even though he has sufficient funding to release himself from teaching all together, he insists on teaching at least one course per semester to stay in touch with young men and women seeking a worthwhile higher education.

Below, are some students' comments on his teaching capabilities and style:

UNM:

"Very approachable, always make himself available Willing to answer questions, helpful, knowledgeable Enthusiastic, biggest motivator I have seen at UNM One of the best professors I have ever had Easy to talk to and unassuming person Friendly, knowledgeable and fair Graded fair, gave us second chance Projects and presentations were very rewarding experience Cared if we understand Best professor I have had at UNM"

University of Texas, SA:

"Both in the class and out of class, you were always more than willing to help me with any problem I had," ... "I do not think I will ever forget the wonderfully challenging course that you gave us think last spring." Thank you for teaching at UTSA and thank you for so kindly helping me on my journey to become a physician."

"Hello Dr. Jamshidi: I just wanted to say thank you for the care and effort you put into your undergrad controls course. The knowledge I gained in control systems I know has benefited me immensely in my current role as a design engineer. Your course was one of the most challenging yet one of the most rewarding I experienced in my undergrad career. Keep up the good work and know that students such as myself will appreciate the forward momentum you provide in obtaining a technical career. The lab experience you make available is invaluable and I know many students will appreciate the opportunities you make available to them." UTSA 2013.

Professor Jamshidi, I would like to share the following with you. I applied for a Undergraduate REU program in Mechatronics, Robotics, and automated system design at Texas A&M College Station a couple of a weeks ago and I found out last week I got pick out of the 128 people that applied. Only 10 were chosen. Because of your experiments and homework, I actually had something to talk about related to those subjects. They wanted to see someone very interested and taking your robotics course and also Intelligent Controls are very interesting. I would like to thank you for teaching this course because if it wasn't for this course, I don't think I would have got in. Again, thank you again Professor.

### VISITING OVERSEAS STUDENTS

- 1. Ben Horan (PhD at Deakin University, Co-advisor, Ph.D. completed in 2008, 6 months visit at UTSA, 2006)
- 2. Matthew Joordens (PhD at Deakin University, Co-advisor, Ph.D., completed in 2010, 14 months visit at UTSA, 2008-2009)

3. Anjan Kumar Ray (PhD at Indian Institute of Technology, Co-advisor, Ph.D. completed in 2009, 6 months visit at UTSA, 2008)

4. Sami Al-Abrabbuh (BS at King Fahd University of Petroleum and Minerals, Saudi Arabia, July – October 2008)

5. Luis Vega (MS at CIVESTA, Mexico, visit in Spring 2009, Co-advisor, MS to be completed in 2010)

- 6. Aleksander Jevic (PhD at Universidad Polytechnic de Madrid, Co-advisor, Ph.D. completed in 2011, 3 months visit at UTSA, Fall 2009)
- 7. Miguel A P Garza, PhD at UANL, Mexico, Co-advisor to be completed in 2011, 3-months visit.
- 8. CH Huang, PhD at National Central University, Taiwan, Co-advisor, Ph.D., current (April 2011 February 2012).
- 9. Lydie Roine, ENSIG, France (Summer 2012)
- 10. Marjorie Tixier, Lille Polytechnique, France (Summer 2014)

M. Jamshidi has developed 10 new courses at UNM (1980-2005) and UTSA (2006-present):

- *Large-Scale Systems* (EECE 545, 3 credit hours) first taught as EECE 595 in spring, 1980. A graduate-level course developed to provide students with a background and knowledge of an important class of systems large-scale systems. New modeling and control philosophies are given in this course. To go with the course, a new text on this area was written which is now the standard textbook on large-scale systems throughout the world. The book has been translated and reproduced in 4 foreign and English languages.
- *Computer-aided Robotics* (EECE 444, 3 credit hours) first taught as in fall 1988. A seniorlevel course developed to provide students with a different background and knowledge of robotics, i.e. a computer-aided approach. Classical subject such as kinematics, dynamics, control, trajectory planning, and sensing are covered and the CAD packages are used extensively.
- *Fuzzy Logic with Engineering Applications* (EECE 548, 3 credit hours, cross listed with CE 548) first taught as CE 548 by Professor T. J. Ross. A graduate-level course developed to provide students with a background and knowledge of fuzzy logic and applications in engineering systems.
- *Intelligent Systems* (EECE 595-008, 3 credit hours) first taught as EECE 595-005 in spring, 1989. A graduate-level course developed to provide students with a background and fundamental correlation on expert systems, neural networks, and fuzzy logic. Several applications are also covered.
- *Advanced Fuzzy Logic Control Systems* (EECE 595, 3 credit hours) a graduate-level course on fuzzy logic clustering, pattern recognition and control.
- *Autonomous Control Systems* (EECE 595, 3 credit hours) a graduate level course on the applications of computational intelligence for design fuzzy logic clustering, pattern recognition and control.

- *System of Systems Engineering* (EECE 595, 3 credit hours) a graduate level course on the applications of complex systems and their formulations in the framework of system of systems. Applications are covered in national security, military, space, information technology, etc.
- Introduction to System of Systems Engineering (ECE 5243, 3 credit hours) a graduate level course on the architecture, modeling, simulation, control and applications of system of systems engineering. Applications are covered in national security, military, space, information technology, etc.
- *Network Control Systems* (EC 5243, 3 credit hours) a graduate elective course on the application of ad hoc wireless network for sensor feedback, actuator signal transmission, stability of NCS as a function of network-induced delays, control of time-delay systems, real implementations.
- *Renewable Energy Systems* (EC 5243, 3 credit hours, offered in Fall 2012) an undergraduate /graduate elective course on the principles of renewable energy, marketing, price dynamics, smart grids, wind turbines, solar power systems, interoperability and cyber security issues and cost-benefit aspects of renewable energy projects.
- Computational Intelligence for Data Analytics Big Data (EC 5243, 3 credit hours, offered in Spring 2013) a graduate elective course on the principles of CI (fuzzy expert systems, neural computing, evolutionary computing, clustering, data mining and pattern recognition) for information and knowledge extraction of "Big Data". Applications are energy, financial markets, bio-engineering, etc.

### INTERNATIONAL PROFESSIONAL CONFERENCES:

- 1. General Chairman, First Iranian Congress in Electrical Engineering, May, 1974, Shiraz, IR
- 2. Registration Chairman, IEEE Conf. Decision and Control (CDC), 1980.
- 3. General Founding Co-Chairman, 1st ISR (International Symposium on Robotics) Nov., 1986, Albuquerque, NM, USA
- 4. General Chairman, 2nd ISR (International Symposium on Robotics) Nov., 1988, Albuquerque, NM, USA
- 5. Chairman, Symposium on Circuits, Systems, and Information, May, 1990, Los Angeles, CA
- 6. General Chairman, 3rd ISRAM (Int. Symposium on Robotics and Manufacturing) July, 1990, Vancouver, BC, Canada
- 7. Publication Chairman, 4th American Nuclear Society Topical Meeting on Robotics and Remote Systems, 1991, Albuquerque, NM, USA
- 8. General Founding Co-Chairman, 1st Int. Congress on Environmentally Conscious Manufacturing, September, 1991, Santa Fe, NM, USA
- 9. Chairman, Symposium on Fundamentals of Discrete-Time Systems (A meeting in honor of Professor Eli Jury), June 1992, Chicago, IL.
- 10. General Chairman, 4th ISRAM November 1992, Santa Fe, NM, USA
- 11. General Co-Chairman, 2nd Int. Congress on Environmentally Conscious Design and Manufacturing, 1993, Washington, DC, USA
- 12. General Chairman, 5th ISRAM and 1st World Automation Congress WAC, August 1994, Maui, HI, USA

- 13. General Chairman, 2nd WAC World Automation Congress, May 1996, Montpellier, France
- General Chair Inaugural NASA University Research Centers Technical Conference, URC-TC '97 (Honorary Co-Chairs: The Honorable Dan Goldin, NASA Administrator and the Honorable Senator Peter Dominici, R-New Mexico), Albuquerque, NM, USA, February 14-16, 1997.
- 15. Program Chairman, 1997 IEEE Robotics and Automation Conf., April 1997, Albuquerque, NM, USA
- General Chairman, 3rd WAC World Automation Congress, May, 1998, Anchorage, AK, USA
- 17. General Chairman, 1st ACE NASA PURSUE Student Conference APSC '99, Univ. of New Mexico, April 19-20, 1999, Albuquerque, NM
- 18. General Chairman, 4th WAC-World Automation Congress, June 11-16, 2000, Maui, HI, USA.
- 19. General Chairman, 5th WAC-World Automation Congress, June 9-13, 2002, Orlando, FL, USA.
- 20. General Chairman, 6th WAC-World Automation Congress, June 28-July 1, 2004, Seville, Spain
- General Chairman, IEEE International Conference on Systems, Man and Cybernetics, Big Island, Hawaii, USA, Oct. 10-12, 2005 (<u>http://ieeesmc2005.unm.edu</u>).
- 22. General Chairman, 2006 IEEE International Conference on System of Systems Engineering, April 24-26, 2006, Los Angeles, CA, USA.
- 23. General Chairman, 7th (20th Anniversary) WAC-World Automation Congress, July 25-28, 2006, Budapest, Hungary (wacong.org)
- 24. General Chairman, 2007 IEEE International Conference on System of Systems Engineering, April 24-26, 2006, San Antonio, TX, USA (*ieeesose2007.org*)
- 25. General Chairman, 8th WAC-World Automation Congress, September 28 October 1, 2008, Waikoloa, Hawaii, USA (wacong.org)
- 26. General Chairman, 2008 IEEE International Conference on System of Systems Engineering, June 1-5, 2008, Monterey, CA, USA (*ieeesose2008.org*)
- 27. General Chairman, 2009 IEEE International Conference on System of Systems Engineering, June 1-3, 2009, Albuquerque, NM, USA (*ieeesose2009.org*)
- 28. General Chairman, 9th WAC-World Automation Congress, September 19 23, 2010, Kobe, Japan (wacong.org)
- 29. Founding General Chairman, 2010 IEEE International Conference on System of Systems Engineering, June 22-24, 2010, Loughborough, UK (*ieeesose2010.org*)
- 30. Founding General Chairman, 2011 IEEE International Conference on System of Systems Engineering, June 27-20, 2011, Albuquerque, NM, USA (*sose2011.org*)
- 31. General Chairman, 10th WAC-World Automation Congress, June 24-27, 2012, Puerto Vallarta, Mexico (wacong.org) <u>http://www.icsu.org/icsu-latin-america/what-we-do/activities-outreach/intarnational-institutions/world-automation-congress-2012</u>
- 32. Founding General Chairman, 2012 IEEE International Conference on System of Systems Engineering, July 13-16, 2012, Genoa, Italy (*sose2012.eu*)
- 33. Founding General Chairman, 2013 IEEE International Conference on System of Systems Engineering, June 2-6, 2013, Maui, HI, USA (*sose2013.org*)

- 34. General Chairman, 3<sup>rd</sup> Annual World Conference on Soft Computing, Dec. 16-18 2013, San Antonio, TX
- 35. Founding General Chairman, 2014 IEEE International Conference on System of Systems Engineering, June 9-13, 2014, Adelaide, Australia, (<u>http://sosengineering.org/2014/</u>)

### **TECHNICAL REVIEWER**

- 1. National Science Foundation
- 2. IFAC J. Automation
- 3. Computers & Electrical
- 4. IEEE Trans. Sys. Man. Cybernetics
- 5. Intelligent and Robotic Systems
- 6. <u>Robotic Systems</u>
- 7. IEEE Trans. Automatic Control
- 8. IEEE Transactions on Fuzzy Systems
- 9. IEEE Trans. Robotics and Automation
- 10. Canadian Research Council (NSERC)
- 11. ASME J. Dynamic and Control
- 12. IEEE Control Systems Magazine
- 13. American Control Conference
- 14. IEEE Conf. Decision and Control
- 15. IFAC World Congress
- 16. Robotics & CIM Journal
- 17. <u>Robotica Journal</u>
- 18. Journal of Intelligent and Fuzzy Systems
- 19. Journal of Intelligent and Robotic Systems
- 20. Journal of Robotic and Autonomous Systems
- 21. Journal of Intelligent Manufacturing
- 22. World Automation Congress
- 23. Journal of Intelligent Automation and Soft Computing AutoSoft
- 24. IEEE International Conference on Robotics and Automation
- 25. IFAC International Conference on Large-Scale Systems
- 26. IEEE Conf. on Sys. Manufacturing and Cybernetics
- 27. Fuzzy Days Conference, Dortmund, Germany
- 28. NASA Surface Systems (Rover) Technology
- 29. NASA Office of Equal Opportunity (Code EU)
- 30. State of Texas University System
- 31. University of Bridgeport (Conn.) Computer Science Doctoral Program
- 32. North Carolina A&T State University, Chair of PhD Review Committee
- 33. University of United Arab Emirates, Al-Ain, UAE
- 34. University of Bahrain, Bahrain
- 35. Georgia State University, USA
- 36. University of Sharjah, UAE
- 37. American University of Beirut, Lebanon
- 38. DOE Idaho Laboratory
- 39. DOE HQ Office of Renewable Energy and Energy Efficiency

- 40. IEEE Transaction on System, Man and Cybernetics, Part A
- 41. IEEE Systems Journal
- 42. Indian Institute of Technology Kanpur, India
- 43. NSF Center for MEMS and Nanotechnology, State of Arkansas, 2008-2010.
- 44. Indian Institute of Technology Rorkee, India
- 45. National University of Singapore, Singapore.
- 46. US DOE Smart Grid Program

### EDITORIAL ASSIGNMENTS OF PROFESSIONAL JOURNALS

- 1. Associate Editor IFAC J. Automatica, Pergamon Press, UK, (1976-1990).
- 2. Founding Editor, Editor of IEEE Control Systems Magazine, NY, NY (1980-1984).
- 3. Editor-in-Chief, <u>Computers and Electrical Engineering An International Journal</u>, Elsevier Publishing Company, Oxford, UK, (1989-present)
- 4. Associate Editor, *J. Large-Scale Systems* and later *Information and Decision Technologies*, North Holland, Amsterdam (1978-1989).
- 5. Associate Editor, ASME Manufacturing Review, ASME Press, NY (1990-1993).
- 6. Editorial Advisory Board, *J. of Intelligent and Robotics Systems*, Kluwer Academic Publishers, Dordrecht, the Netherlands (1987-2007).
- 7. Editorial Advisory Board, *Int. J. Control and Computers*, ACTA Press, Canada (1985-Present).
- 8. Editorial Advisory Board, *Encyclopedia of Physical Sciences and Technology*, Academic Press, San Diego, CA (1986 present).
- 9. Editorial Advisory Board, *Electrosoft*, Computational Mechanics Publications, Dorchester, UK (1989 1992)
- 10. Associate Editor (1974-79) and Member of the editorial board, *Iranian Journal of Science* <u>& Technology</u> (1984-Present).
- 11. Series Editor, <u>ASME Press series on Robotics and Manufacturing Recent Trends in</u> <u>Research, Education, and Applications</u>, New York, NY, 1986-1996.
- 12. Series Editor, *Prentice Hall Series on Environmental and Intelligent Manufacturing Systems*, Upper Saddle River, NJ, 1991-1998.
- 13. Regional Editor, <u>Scientia Iranica International Journal of Sciences and Technology</u>, Sharif University of Technology Press, IR (1992-present).
- 14. Co-Editor-in-Chief, *International Journal of Environmentally Conscious Design and* <u>Manufacturing</u>, ECM Press, (1991-1994)
- 15. Founding Co-Editor-in-Chief, *International Journal of Intelligent and Fuzzy Systems* Applications in Engineering and Technology, Wiley & Sons, New York, and IOS Press, Amsterdam, the Netherlands, (1992-2006) and since 2006, Co-Editor-in-Chief Emeritus.
- 16. Series Editor, *Intelligent Automation and Soft Computing*, TSI Press, Albuquerque, NM (1994-Preset).
- 17. Consulting Editor, *Encyclopedia of Life Support Systems EOLSS*, UNESCO, Paris, France, 1994-1998.
- 18. Chairman, International Advisory Board, *Journal of Intelligent Automation and Soft* <u>Computing - AutoSoft</u>, AutoSoft Press, Albuquerque, NM (1994-2002).
- 19. Advisory Board Member, *International Journal on Soft Computing*, Springer Verlag, Germany, (1996-2002).

- 20. Editor-in-Chief, *Intelligent Automation and Soft Computing Journal*, (Official Journal of World Automation Congress), TSI Press, San Antonio, TX, USA, (2002-present)
- Editorial Board Chairman, <u>Intelligent Computing for Medical Sciences and Image</u> <u>Processing, icmedejournal.org</u>, (Official Journal of International Forum on Biomedicine and image processing – IFMIP), TSI Press, San Antonio, TX, USA, (2007-present)
- 22. Editorial Advisory Board , *Journal of Enterprise Transformation*, Taylor & Francis (INCOSE Publisher), USA, (2011-present)
- 23. Editor-in-Chief, *IEEE Systems Journal*, IEEE, NY, NY, USA, (2006--2012)

**UTSA ANNUAL STUDENT CONFERENCE** Since 2006, we have launched an annual research conference at UTSA for Engineering, Science and Business students. These conferences have been welcomed by students from engineering and science disciplines. Deans of both Science and Engineering and Associate Dean of Academic Affairs of Engineering (Dr. M. Shadaram) have been among supporters of this event. SwRI (via Mr. Walt Downing, Executive VP), Rackspace The Open Cloud Company (via Ms. Melisa Gray) are the primary industrial sponsors and supporter of this event from the beginning. Every element of these conferences from general chair, program chair, and finance chair on to award chair are all students from doctoral level to undergraduates.

**MINORITY STUDENTS RECRUITMENT** During the past 4 years or so, several student groups have been set up with undergraduate and graduate minority and majority students at ACE Laboratory. Jamshidi has helped educate 65 MS and 20 Ph.D. students at ACE Center (NM and Texas) since 1984. Jamshidi was featured in a national magazine -- in *Outlook on Hispanic Education*, pp. 19-21 under the title of "Mo Jamshidi – Big Thinker with a Big Heart", by Tony and Alison Martinez on January 9, 2006. Jamshidi has used an innovative approach to educating minorities, called VI-P® (vertically-integrated projects, see Figure below), at UTSA from the very beginning.

### COMMITTEE ASSIGNMENTS AT UTSA

Member, DFRAC, ECE Department tenure and promotion committee, 2006-present.
Chair of search committee for 3 junior positions, 2007-2009.
Member, Special Session of DFRAC, Civil Engineering Department tenure and promotion committee, 2008
Member, CFRAC, College of Science promotion and tenure, 2008-2010
Chair of Department Graduate Studies Committee, responsible for all graduate admissions, reports to graduate School and Dean's office and coordinate biannual qualifying exam (2007-2009)
Member, UFRAC (All university promotion and tenure committee), UTSA, 2008-2010
Member, UTSA Scholarship Committee, 2008-2010
Began establishing a Personal UTSA Scholarship Fund for ECE Department, 2006 – present
Member, UTSA University tenure and promotion Committee UFRAC, 2009-2010.
Chair, UTSA University tenure and promotion Committee UFRAC, 2009-2010.
Chair, ECE Chair Search Committee, 2011-2012.
Member, ECE Department Senior Council, 2012-

### **INTERNATIONAL TRAVEL AND SPEECHES:**

Mo Jamshidi has traveled to nearly 109 countries, many of the engagements as invited keynote speaker at national and international conferences. His books are housed in special sections of libraries in many parts of the world. Latest invitation is European Union's systems and control conference, October 5-7, 2009, Brussels, Belgium.

### INTERNATIONAL AGREEMENTS AND RELATIONS

Our effort has connected UTSA with Institutions in all continents except for Africa.

**IIT** – **Kanpur** This relationship started with a trip of COE Dean to Indian Institute of Technology, Kanpur (among the top Institutions in India). Control engineering professors at IIT-K came to attend IEEE SoSE Conference in 2007. The relation strengthened by a visit of a doctoral student from IIT-K to the Laboratory and subsequent co-advisorship of Jamshidi for that particular student. The student graduated from IIT-K in June of 2009. In 2008 a joint proposal between the Laboratory and similar group of Prof. L. Behera led to a grant from INDO-US science and technology Forum for a workshop on SoSE (approved funding at \$ 45K). This workshop will be held in Kanpur on October 26-28, 2009 with 8 top US and 15 Indian top scientists attending. Proceeds of this workshop will be published by CRC Taylor & Francis Publishers. The doctoral student has graduate at IIT-K in June 2009.

**Deakin University** – In summer of 2006 Deakin University Vice Chancellor designated Jamshidi as an honorary professor and approved a grant to visit there for 4 weeks. Deakin University approved 2 visits of 6 and 13 months of their doctoral students to the Laboratory. These visits led to 2 graduations of Ph.D. degrees based on their research works at UTSA.

**Cardiff University**, Wales, UK - Shared an honorary position as UK Royal Academy of Engineering Distinguished Fellow for 2009-2010. Cardiff University's Manufacturing Engineering Center has welcomed SoSE technology and plan to send a visiting PhD student to ACE Laboratory at UTSA.

**University of East London** – Upon my IEEE SMC Lecture in London at UEL this summer, their Computing School is planning to prepare an agreement with UTSA to send their students to visit ACE Laboratory.

**University of Ulster**, Derry, N.I., UK - Upon my UK-RAE Lecture at Ulster, in Northern Ireland, this summer, their Intelligent Systems Center is also planning to prepare an agreement with UTSA to send their Ph.D. students to visit ACE Laboratory.

**Universidad de Polytechnic de Madrid** (UTSA-UPM Agreement signed) - Upon my Summer 2008 Lectures at UPM their Image Processing and DSP Laboratory has chosen to join our Consortium and currently we are hosting one of their Ph.D. students at ACE Laboratory.

**CINVESTAV** – Guadalajara, Mexico (UTSA-CINVESTAV – Mexican National Research Center group official agreement signed). This agreement was formalized by UTSA Administration and the first exchange was an MS student visited ACE Laboratory for 7 months. His research was consisted of a quad-rotor helicopter design.

**University of Birmingham** – As an Honorary Professor of this prestigious Institution, major collaborations are being planned between UTSA and possibly other Institutions of the University of Texas System during summer, 2012 in UK.

**Obuda University** – As an Honorary Professor of this Budapest Hungary Institution, Septmber, 2012.

### **Energy-Related Activities:**

My energy research career goes back 35 years ago as follows:

- a) Research work on coal-fired power plants and air pollution effects at IBM Research Center (Yorktown Heights, NY, 1975-77)
- b) Work on energy modeling and forecasting at Technical University of Denmark (Lyngby, Denmark, Spring 1977)
- c) Research work on solar energy on funded work at UNM (1982-83).
- d) Research and consulting with Oak Ridge National Laboratories on nuclear energy and nuclear reactors modeling, instrumentation and control (1989-1992).

Two year prior to the arrival of Dr. Shepherd, I and two graduate students begun forming an energy team and contacted SECO (State Energy Conservation Office, Austin). Soon, we invited Dr. Kelley to join in and later on added Dr. Hari Krishnaswamy, Dr. Shuo Wang, Dr. Ram Krishnan and Dr. C J Qian. Today, the group also has 14 graduate students (8 MS and 6 Ph.D.). From this group of students, I act as advisor or co-advisor to 5 Ph.D.'s and 5 MS students. The energy initiative has produced the following funding opportunities:

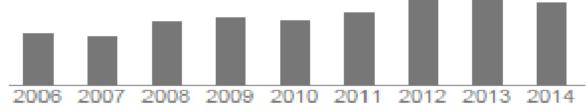
- 1) SECO1 ((Kelley PI, I and Krishnaswamy Co-PI's), \$ 1.39 ML (152 KWh solar energy for UC-III and EB buildings), 2009-2011, supporting 2 PhD and 2 MS students.
- SECO2 (Kelley PI, I am a senior advisor), \$ 0.91 ML (130 KWh solar energy and electric vehicle level 2 charging station for UTSA Downtown Campus (Durango Building), 2010-2011, supporting 1 PhD and 2 MS students.
- 3) CPS Energy (I serve as PI, Krishnaswamy as Co-PI), \$ 400K (leading to a distributed energy grid laboratory, on West Campus, 2<sup>nd</sup> space allocated to me when I joined UTSA). The laboratory was inaugurated in September 2011, supporting 4 PhD and 4 MS students.
- 4) Software gift to UTSA Energy Research team (\$ 200K) from Power Analytics:

**Paladin<sup>®</sup> DesignBase<sup>™</sup>** ... Designs, models, simulates, certifies behavior of complex electrical distribution systems and creates a virtual schematic (or "DesignBase") containing expert knowledge of the distribution system. MOU has been signed between Power Analytics and UTSA via TSERI.

### SCIENCE CITATIONS: http://scholar.google.com/citations?hl=en&user=OVAWAEUAAAAJ&view\_op=list\_works&sortby=pubdate

#### **Citation indices**

	All	Since 2010
Citations	6662	2722
<u>h-index</u>	34	23
i10-index	104	53
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### **RESEARCH FUNDING:**

Mo Jamshidi has been the principle investigator or co-principle investigator of several research grants, contracts and cooperative agreements in the US. Among his funding agencies one can name NASA, Department of Defense (US Air Force and DARPA), Department of Energy (Sandia National Laboratories, Los Alamos National Laboratory and Oak Ridge National Laboratory), National Science Foundation, IBM Corporation, General Motors Corporation, AT&T Corporation, Siemens Corporation (France) among others. The total research funding he has brought in at the University of New Mexico is approximately US **\$21,877,000** ML from 1983-2014. Detailed list is given below.

#### FUNDED RESEARCH GRANTS AND COOPERATIVE AGREEMENTS:

- 1. Principal investigator for over \$21.877 million from various agencies since 1983. A partial list follows:
- 2. 1983 \$55,000 Funding acquired from: IBM Information Products Division (Modeling and design of print head electronics of laser printers). Student support: 1 Ph.D.
- 1984 \$99,000 Funding acquired from: GM Research Laboratories (Automobile engine modeling and simulation), US Air Force Weapons Laboratory (Phase-array telescopes), UNM Office of Research (establishment of CAD Laboratory). Student support and release time: 1 MS, 1 Ph.D. 15% release time.
- 4. 1985 \$93,000 Funding acquired from: US Air Force Weapons Laboratory (Phased-array telescopes), Digital Equipment Corporation (optimal pixel location of gray-level images), and Lockheed Corporation (Identification of STAR-LAB project). Student support and release time: 2 MS, 1 Ph.D., 20% release time.

- 1986 \$67,000 Funding acquired from: US Air Force Weapons Laboratory (Phased-array telescope), SYSCON Corp. (AI use in character recognition). Students' support and release time: 1 MS 20% release time.
- 1987 \$54,000 Funding acquired from: US Air Force Weapons Laboratory (An Adaptive Control of Phased-array Telescopes). This research produced one US Air Force patent. Student support and release time: 1/2 time Ph.D. and 20% release time. This work lead to a US Air Force Disclosure.
- 7. 1988 \$84,000 Funding acquired from: Sandia National Laboratories (Intelligent control of a robotic gripper). US Air Force Weapons Laboratory (Simulation environment for Phased array imaging telescopes). Student support and release time: 3 MS
- 8. 1989 \$150,000 Funding acquired from: US Air Force Weapons Laboratory (Phased-Array Imaging Telescopes), Sandia National Laboratories (Neural Networks-based control of robot manipulators), and Oak Ridge National Laboratories (Control and simulation environment for nuclear reactors). Students' support and release time: 3 MS, 3 Ph.D., 20% release time.
- 9. 1990 \$214,000 Funding acquired from US Air Force Weapons Laboratory (Modeling of Phased-array imaging telescopes), Sandia National Laboratories (Control and teach pendant design of an Adept II robot), Oak Ridge National Laboratory (Simulation and control of nuclear reactors). Canadian Research Council (Robotics and manufacturing education and research evaluations). Student support and release time: 3 MS and 3 Ph.D.
- 10. 1991 \$268,000 Funding acquired from US Air Force Phillips Laboratory (Image restoration by optimization), Sandia National Laboratories (Adaptive force Control of an Adept II robot. Simulation and control of nuclear reactors, intelligent control of robot manipulators), US Air Force Office of Scientific Research (Research on imaging telescopes), Los Alamos National Laboratory (Fuzzy control of chemical process control systems) Student support and release time: 3 MS and 4 Ph.D., 10% release time.
- 11. 1992 \$89,000 Funding acquired from NASA Jet Propulsion Laboratory (Primary PI for NASA's initial minority students graduate research program, other co-PIs are T. Ross, Civil Engr., G. Starr, ME, C. Abdallah and D. Peterson, EECE, and R, Colbaugh, ME-NMSU) Student support: 2 MS and 1 Ph.D.
- 12. 1993 \$13,000 Funding acquired from WERC Waste Education and Research Consortium (Co-PI with R. D. Colbaugh, NMSU) Research on fault-tolerant robotics Student support: 2 Ph.D., partial.
- 13. 1992 \$50,000 Funding acquired from Polaroid Corporation Research on fuzzy control of a video printer Student support: 1 Ph.D. The work lead to a US Patent in 1996.
- 14. 1995 \$6,400,000 Funding acquired from NASA to establish Center for (5-year grant) Autonomous Control Engineering - ACE, Student support to graduation to date: 65 MS and 17 Ph.D. Minority Students (see <u>http://ace.unm.edu</u>)
- 15. 1996- \$165,000 Funding acquired from WERC (Co-PI with N. Vadiee). Research (2-year grant) on intelligent control of environment clean-up: 2 MS students
- 16. 1996- \$35,000 Funding acquired from University of New Mexico Development Fund (1year grant) of a fuzzy logic film printing unit, 1 MS and 1 PhD students
- 17. 1997- \$76,000 Funding acquired from Montana State University (NSF) (3-year grant Applications of a fuzzy logic to power systems transient stability, 1 PhD student

- 18. 1998- \$2,490,000 Funding acquired from NASA for Undergraduate (5-year grant) Research for Space Applications (Co-PI. D. Kauffman). Funds has supported over 250 undergraduate research students (see <a href="http://pursue.unm.edu">http://pursue.unm.edu</a>)
- 19. 1999- \$26,000 Funding acquired from University of Arizona (1-year grant) (Prime for DARPA) for Applications of Discrete-Event Systems to Autonomous Robotic Agents
- 20. 2000- \$1,070,000 Funding acquired from NASA Cross Enterprise (NRA) (3-year grant) for Stochastic Learning Automata and Intelligent Approaches to Multi-Physics Modeling
- 21. 2001 \$6,000,000 Funding acquired from NASA to continue URC-2 Program (5-year grant) Autonomous Control Engineering ACE, Proposed schedule is for 50 MS and Ph.D. Minority Students (see <u>http://ise.unm.edu</u>).
- 22. 2002- \$ 160,000 Funding acquired from US Air Force Research Laboratory (2 years) Diagnostic and Prognostics of Hardware Systems via Neural network Paradigms
- 23. 2003- \$ 22,000 Funding acquired from Missile Defense Agency (1/2 year) Diagnostic and Prognostics of Laser Borne Systems
- 24. 2004 \$ 30,000 Funding acquired from DOE Headquarters via Oak Ridge National Laboratory (2 years) Applications of robotic Manipulation in Efficient Energy Consumption of
- 10 US industries of the Future
- 25. 2004 \$ 65,000 Funding acquired from US Air Force Research Laboratory (1 year) Diagnostic and Prognostics of Hardware Systems via neural network Paradigms
- 26. 2006 \$ 250,000 Funding from University of Texas System, Austin, Texas to build ACE at UTSA, San Antonio, Texas.
- 27. 2006-present \$ 400,000 Lutcher Brown Endowment Fund, Mobile Robotics and Anti-Terror Technology.(Progress of this work has been featured on NBC and FOX Affiliates in October 2006 in San Antonio and Houston, TX) and was on PBS in 2007 in Austin, Texas.
- 28. 2008 \$ 45,000 INDO-US Workshop on System of Systems Engineering, held in Kanpur, India, October 26-28, 2009.
- 29. 2009, \$30,000 MedPod Corporation Foundation, Donation for Research in Environmental Systems, 2009-2011.
- 30. 2009, \$80,000, WorldCar Foundation, Donation for Research in Green energy Systems, 2009-2011.
- 31. 2006, \$ 150,000, IEEE, Headquarters of the IEEE Systems Journal. 2006-2012.
- 32. 2010, \$ 1,397,000, Texas State Energy Conservation Office, Smart Micro-Grid for Solar Energy of UTSA Campus, (Co-investigators B. Kelley and H. Krishnaswami), 2010-2011.
- 33. 2010, \$ 305,000, CPS Energy Company, San Antonio, Texas, Sustainable Energy Systems Modeling, Control and Optimization, (Co-investigators H. Krishnaswami), 2010-2011.
- 34. 2011, \$ 900,000, Texas State Energy Conservation Office, Smart Micro-Grid for Solar Energy of UTSA Downtown Campus, (PI: B. Kelley), 2010-2011. Texas State Energy Conservation Office, Smart Micro-Grid for Solar Energy of UTSA Campus.
- 35. 2011-2013, \$ 35,000, European Commission, EU, Brussels, Belgium (UTSA is partner with Purdue and Loughbrough University, UK).
- 2011, \$ 200,000 Paladine<sup>©</sup> Software Environment Gift, Power Analytics Corp., Raleigh, NC.
- 37. 2012, \$ 45,000 STTR Grant from MDA, DOD through 5-D Systems Inc., Austin, TX, Phase 1 (6/1/2012 to 12/31/2012).
- \$ 172,262 CPS Solar Forecasting for City Public Service, 08/28/2013 R Vega (PI) Co-PI M. Jamshidi

39. 2015-2019, \$ 1,300,000 Center of Autonomy- Autonomous Vehicles, USAF, PI M. Jamshidi.

#### Subtotal Funding - \$22,999,262

### **EQUIPMENT GRANTS:**

Funding agencies: IBM, AT&T, National Semiconductor, DEC, Polaroid, and UNM Foundation.

1984 - 1993 \$210,000 Equipment Grants: Assorted new equipment (DEC terminals, industrial Robot, Adept-II Robot, AT&T workstations, computers, video printer, camera, etc.).

2006 \$ 45,000 BEI Technology – Sensor equipment, UTSA. 2006-1012, SwRI, San Antonio, TX, \$ 10,000 grant 2010-2012, Rackspace Hosting, San Antonio, TX. \$ 10,000 grants

#### Total Grants and Equipment \$23,274,262 (1983-2015)

#### MS THESES AND PhD DISSERTATIONS SUPERVISED:

Jamshidi has supervised (or co-supervised) or currently supervising the following 57 MS theses and 48 Ph.D. dissertations since1984.

#### Master of Science Theses: (\*\* minority Student)

- 1. "Hierarchical model and structural properties of large-scale energy systems" Theiry Portas, 1985.
- 2. "Sun tracking by peak power positioning for photovoltaic concentrator arrays" Daniel A. Pritchard, 1986.
- 3. "Hierarchical control of time-delay discrete-time systems" Jane M. Brideau\*\*, 1987.
- 4. "Optimization of large-scale non-linear systems with time-delay" C.-M. Wang, 1988.
- 5. "Software engineering design of linear control systems" Robin S. Morel\*\*, 1989.
- 6. "On the computational aspects of Kalman filtering" Tom C. Yenn, 1990.
- "Software engineering design and analysis of multivariable control systems" Gerald L. Schotik\*\*, 1990.
- 8. "The design of device independent and system independent computer application packages" John T. McGuffin, 1990.
- 9. "On the computer aided robust decentralized control design of a five-axis robot" Chung-Shi Tseng, 1991.
- "Robot-S: An interactive design and simulation language for robot manipulators," Steven R. O'Neill, 1991.
- 11. "On the connection-based control architecture for robot manipulators" William Horne, 1992.
- 12. "Modeling and control of an optical phase array imaging telescope with a wide field of view" Joseph A. Meinhardt, 1993.

- 13. "A MATLAB-based ToolBox for robot manipulators" William Honey, 1992.
- 14. "Modeling and control of fuzzy control systems with applications to industrial systems" Denis Barak, 1993.
- 15. "Adaptive Optics System Control Using Linear Quadratic Methods" Scott Peterson, 1993.
- 16. "Nonlinear and fuzzy control of electric power systems" Elli Kristjansson, 1993
- "Applications of fuzzy logic to stock markets and financial planning" Douglas Miller\*\*, 1993
- 18. "Fuzzy Control of Automotive Engines Idle Speed," A. Martinez\*\*, 1993.
- 19. "Adaptive fuzzy control of electric power systems" Huimin Xue, 1994.
- 20. "A control approach for laser guidance systems" Steve Baugh\*\* 1995
- 21. "A software environment for risk assessment " Jay Bhata (Co-advisor: S. Heger), 1996
- 22. "Fuzzy control of multi-stage flash desalination systems" Finnur Olaffsen (LAAS-CNRS, France), 1995
- 23. "Fuzzy control of complex systems using rule hierarchy and sensory fusion" Jasper Bruinzeel (LAAS-CNRS, France), 1995.
- 24. "On the stability of fuzzy logic control systems" Ali Jadbabaie, 1997. (Currently, Professor, University of Pennsylvania)
- 25. "Intelligent simulation for cooperative robots" Olivier Pages (INSA France), 1997.
- 26. "Fuzzy Logic Image Enhancement of Film Printing" Aly El-Osery, 1998
- 27. "SoftLab© Neural network applications" Daniel Aznar (INSA, France), 1998
- 28. "Intelligent control of electric power systems" Remi Lecointe (INSA, France), 1999
- 29. "SoftLab© Neurcomputing and Adaptive Fuzzy systems" Francois Lhomme (INSA, France), 1999
- 30. "Intelligent navigation of mobile robots" Tanya Lippincott\*\*, 1999
- "Numerical Solutions of Dynamic Mode Inverse Kinematics Problem for Robotic Manipulators," X. Zhu (Mechanical Engineering), 2000
- 32. "Dynamic Modeling and Optimal Control of Satellite Arrays," A. Rommel (University of Seigen, Germany) 2001
- 33. "Fuzzy Control of Water Desalination Systems," V. Vakipuram, 2002
- 34. "Fuzzy Control of Electric Power Systems," Y. Lu, 2002
- 35. "Stability of Fuzzy Control Systems with Application to Power Systems," S. Murali, 2002
- 36. "Fuzzy logic applications of mobile rovers," S. Sheikh-Bahaei, 2003
- 37. A virtual discrete-event simulation and modeling of intelligent agents," Prasanna Sridhar, 2003.
- 38. "A genetic algorithm optimized fuzzy control of intelligent agents," Shan Xia\*\*, 2004.
- 39. "Predictive control of intelligent agent systems," Alireza Naddaf, 2004.
- 40. "Intelligent Navigation of All-Train Rovers," Umesh Dole, 2004.
- 41. "Simulation of a Spacecraft Electrical Power Distribution System Using the Simulink Power System Block set and Soft Computing Techniques," Scott Beatty, 2005.
- 42. "Autonomous control and sensor fusions of robotic agents," Vikraman Raghavan, 2007.
- 43. "Underwater communication among Rovers," Kranthi Manooj, 2009
- 44. "Design and Simulation of a DC Thruster Motor," Srujana Eega\*\*, 2009
- 45. "Design and implementation of hybrid fuzzy and adaptive autopilot for UAVS," Jose Gomez\*\*, 2009
- 46. "Analysis, design and implementation of UAV's and ground stations," Aldo Jaimes\*\*, 2009

- 47. "Swarm robotics via Network Control," Peymon Gazi, 2010
- 48. "Design of a Swarm of Autonomous Ground vehicles for Use in Remote Sensing Applications," Patrick Benavidez\*\*, 2010
- 49. "PV Wind Energy, Meryem Fennich\*\*, Graduated in May 2013
- 50. "Design of Hydrogen Gas Micro Turbine", K. Kheradmand, Graduated in December 2014
- 51. "Cyber-Physical Sustainable Energy and Electric Cars", Gerardo Trevino\*\*, 2012 Graduated
- 52. "Control of Space Debris, "Joaquin Labrado\*\*, 2013. Graduated in Dec 2013.
- 53. "Adaptive Rehabilitation of Spinal Cord Injured Persons," Rubin de Albo,\*\* BME Student, 2012 (Co-advisor: Prof. Ong).
- 54. "Optimal management of Smart Grids," Amir Rajaee, Graduated in Dec. 2012.
- 55. "UAV Swarm Modeling and Control," Satish Vaishnav, In progress 2014.
- 56. "Robotic Navigation using SLAM and Image Processing," Mohan Kumar, In Progress 2014.
- 57. "Robotic Control and Sensing," Maryam Ezell\*\*, In Progress, 2014.
- 58. "TSP Problem via Robotics," Rafik Benmansour, Graduated in May 2014.
- 59. "Forecasting Sustainable Energy through Big Data Analytic," Barney Tannahill, Graduated in May 2014.
- 60. "Energy Forecasting of Turkey up to 2023," Levent Sari Graduated in May 2014.
- 61. "Data Analytic Studies for Turkey's Energy Forecast," Halid Kaplan, Graduated, May

2014.

62. Chetan Manikanta Puppala, "SLAM based navigation of quadrotors,:, MS in progress,

2014

63. Eric Weinman, "Machine learning for mobile robotics," Current, 2015.

#### **Doctor of Philosophy Dissertations (\*\* Ethnic Minority Student)**

- "On the extensions of Aoki's aggregation conditions to large-scale stochastic systems" R. E. Salters\*\*, 1984. (Last known employer: University of Denver, USA, Deceased)
- 2. "Modeling and multivariable control of multi-link robot manipulators" Young-Tae Kim (Co-advisor: M. Shahinpoor), 1986. (Last known employer: Donggu University, S. Korea)
- 3. "On Lyapunov stability of bilinear large-scale systems" F. Asamoah\*\*, 1985. (Last known employer: West Indies University, Caribbean Islands)
- 4. "On the extensions of the balanced approach of model reduction with applications to large flexible space structures" John M. Santiago\*\*, 1985. (Last known employer: Colorado College, Colorado Springs, CO, USA)
- 5. "On decentralized pole placement problem with application to robotics" M. Tarokh, 1987. (Last known employer: San Diego State University, USA)
- 6. "On adaptive control of robot manipulators" B. -J. Oh, 1988. (Last known employer: Hannam University, S. Korea)

- "Control and stability of two-dimensional systems" Z. Geng (Co-advisor R. L. Caroll, George Washington University), 1988. (Last known employer: Chinese Academy of Sciences. Beijing)
- 8. "On the Lyapunov stability of large-scale nonlinear systems with time delay" S.-R. Lee, 1990. (Last known employer: Korean Army Academy, S. Korea)
- 9. "On adaptive robust force control of robot manipulators" J.-N. Lieu, 1991. (Deceased)
- 10. "On a Programmable fuzzy logic array based on a new soft fuzzy reasoning paradigm" N.
   H. Vadiee (Co-advisor: T. J. Ross), (Last known employers: University of New Mexico and Southwest Indian Polytechnic Institute, USA)
- 11. "Strong stabilization using fixed-order dynamic compensators," M. Jacobus, 1991. (Last known employer: Sandia National Laboratories, USA)
- 12. "Advance control architectures for nuclear reactors" J. B.-Read\*\*, 1992. (Last known employer: Mexican Nuclear Energy Agency, Mexico)
- 13. "Image restoration using nonlinear optimization techniques on an imaging system." R. A. Carreras\*\*, 1994. (Last known employer: US Air Force Research Laboratory, USA)
- 14. "A neural network for Phase Diversity: Simulation and Experiment" N. Miller\*\*, 1992. (Last known employer: National University of Malaysia, Malaysia)
- 15. "A neural-network fuzzy logic controller for fault-tolerant robot manipulators" K. Kumbla, 1997. (Last known employer: Hitachi Corporation, USA)
- 16. "Fuzzy control and Evolutionary optimization of Complex Systems" M. Akbarzadeh Totoonchi, 1998. (Last known employer: Ferdowsi University at Mashhad, Iran)
- 17. "Monitoring and control of nuclear reactors via a parameter estimation tuning fuzzy controller" N. Alang-Rashid (Co-advisor S. Heger), 1993. (Last known employer: Malaysian Atomic Energy Agency, Malaysia)
- "Adaptive hierarchy of distributed fuzzy control: Application to behavior control of Rovers." - Eddie Tunstel\*\* (JPL Minority Fellow), 1996. (Last known employer: Applied Physics Laboratory, John Hopkins University, USA)
- 19. "An Intelligent Approach to Image Enhancement" A. Asgharzadeh, 1999. (Last known employer: UAE Telecom, Dubai, UAE)
- 20. "Intelligent modeling and control of Flexor-Tendon Repairs via Soft Computing" M. Johnson\*\*, 2002. (Last known employer: Aerospace Corporation, USA)
- 21. "Hierarchical intelligent control of multi-agent systems" M. de Oliviera, 2001). (Last known employer: Brazilian National University, Brazil)
- "Modeling, simulation, design and control of a two-stage desalination pilot plant" P. Sarkar (Mechanical Engineering, 2002) (Last known employer: Tyco Healthcare Valleylab Corp., USA)
- 23. Optimal Control for the Autonomous Deployment of a Remote Sensing Spacecraft Array" Paul De Rego\*\*, 2003. (Last known employer: Honeywell Corporation, USA)
- 24. "Optimal Power Control of CDMA Based Cellular Systems" A. El-Osery, 2002. (Last known employer: New Mexico Institute of Technology, USA)
- 25. "Intelligent control of industrial autonomous systems" W. G. Parkinson, 2002. (Last known employer: Los Alamos national Laboratory, USA, Retired in 2004.)
- 26. "Intelligent Navigation of Automatic Guided Vehicles for Flexible Manufacturing." S. Berman\*\* (Co-advisor Y. Edan, Ben-Gurion University, Beer-Sheva, Israel), 20023. (Last known employer: Ben-Gurion University, Israel)

- 27. "Antenna Baseline Estimation Coherent Interferometric Synthetic Aperture Radar Image Registration - Ana Martinez\*\*, 2003. (Last known employer: Sandia National Laboratories)
- 28. "Intelligent enhancement and recognition in magnetic resonance imaging," Tao Song, 2004. (Last known employer: University of California, San Diego, USA)
- 29. "Fuzzy logic solutions of structural engineering systems," Jonathan Lucero\*\*, 2004 (Coadvisor T. J. Ross, 2004). (Last known employer: Los Alamos National Laboratory, USA)
- 30. "Intelligent pattern recognition and remote sensing, "Yan Wang\*\*, 2004. (Last known employer: Searching employment).
- 31. "Cardiac output modeling and simulation using soft computing, "Jingyu Liu\*\*, 2004. (Last known employer: Mine Institute, University of New Mexico, Albuquerque, NM, USA)
- 32. "Hierarchical Aggregation and Intelligent Monitoring and Control in Fault-Tolerant Wireless Sensor Networks," Prasanna Sridhar, 2007 (Last known employer: Microsoft Corporation, Seattle, WA, USA)
- 33. "Haptic control of a rover in a system of robots framework," Ben Horan, (Co-advisor, S. Nahavandi, Deakin University, Australia), Completed, 2009 (Last known employer: Deakin University, Australia)
- 34. "Hypercomplex Number Based Automated Robotic Vanilla Pollination System with Vision Sensing," Ted Shaynefelt, graduated (Co-advisor: SoS Agaian), 2012. Working at University of Hawaii, Hilo.
- 35. "Design of Virtual environments for Simulation of Wireless Networks," Aleksander Panchul, (Co-advisor, D. Akopian, University of Texas, San Antonio), Completed, 2010.

36. "Navigation and control of robotic swarms in unstructured environments," Anjan Kumar Ray, (Co-advisor: Laxmidhar Behera, Indian Institute of Technology, Kanpur, India),

Completed, 2009.

- 37. "Design and implementation of a system of underwater rovers," Matthew Joordens, (Coadvisor, S. Nahavandi, Deakin University, Australia), Completed, 2009 (Last known employer: Deakin University, Australia)
- 38. "Image processing Advances for Underwater," Somayeh Bakhtiari\*\*, graduated, (Coadvisor: SoS Agaian), 2012. Last known Employer: Sony, Inc.
- 39. "Optimization Model for Low Power Computing in Cloud Data Centers,"," J. Jeff Prevost, Graduated in October 2013.
- 40. "Cloud Centers in Smart Grid Data Analysis," Kranthimanooj Nagothu, graduated 2013 (co-advisor B. Kelley), Last Employer: Theatro Labs, Dallas, TX, USA.
- 41. "Smart Energy Homes," Dariush Shahgoshtasbi, graduated, 2012, (Last known employer: ServiceNow Company, Seattle, WA, USA)
- 42. "System identification of Complex Systems," Elmira M. Bonab\*\*, in Progress, 2014 (Coadvisor: Yufang Jin, UTSA).
- 43. "Implementation of Harmonic Estimators based on Maximally Flat FPGA Target," Miguel A P Garza\*\*, 2011(Co-advisor: Jose' A. de la O Serna, UANL, Mexico).
- 44. "Modeling and Simulation of Brian Tumors," Amy Daali\*\*, Current 2014.
- 45. "Design of a Swarm of Autonomous Ground Vehicles Design and Implementations," Patrick Benavidez\*\*, in Progress 2014.
- 46. "Adaptive Intelligent energy control framework for electrical micro-grids based on energy market and solar energy forecast", Yashar Manjili, in Progress, 2014.

- 47. "Deep architecture paradigms for big data analytic in transportation and biological systems," Arezou Moussavi, in progress 2015.
- 48. "Machine vision with Humanoid Robots," Aldo Jaime\*\*, in Progress 2014.
- 49. "Complex energy systems modeling and control for Turkey" Yunus Yetis in progress
- 50. "Cyber-physical control of robotic systems," Berat Erol, in progress 2014
- 51. ""Big data and Open Stack Cloud Data Centers," Paul Rad, In Progress 2014.
- 52. Ali Miraftabzadeh, Cloud Architecture, 2015

#### ACE Supported Center Minority Other Ph.D. Fellow Graduates

Ayanna Howard (USC, now Professor at GA Tech)

Alberto Behar (USC, now Associate Professor, Arizona State University)

John Moya (UNM, now associate Professor, UTEP)

#### SPECTRUM OF FOMER STUDENT ADVISEES CARREERS

<u>Academics 14</u> (9 are full professors in US and overseas universities, e.g. San Diego State University, University of Denver, University of New Mexico, University of West Indies, New Mexico Institute of Technology, University of Texas at El Paso, National University of Brazil, University of Pennsylvania, Dongku University, Korea, Korean Army Academy, Deakin University, etc.)

<u>Industry 23</u> (all in US companies such as Boeing, IBM, Lockheed Martin, Aerospace Corporation, Allied Signals, Honeywell, XLINK, Microsoft, United Technologies, Woodward Industrial Controls, etc.)

<u>US Government 12</u> (in US Government agencies such as NASA, JPL, Sandia National Laboratories, Los Alamos National Laboratory, US Air Force Research Laboratory, NORAD, etc. One advisee is a Full Colonel in USAF)

<u>Overseas 22</u> (Australia, France, Germany, Brazil, Iran, Korea, Taiwan, Mexico, Norway, Netherlands, Egypt, India, Malaysia. One former advisee was the Deputy Director of Atomic Energy Commission of Malaysia)

Own Business 3 (Own their own companies in the US); one is a multi-million dollar industrialist in Maryland.

### PUBLICATIONS

(\* Denotes graduate students, \*\* Minority Graduate students)

#### Publication activities at a glance:

Total Number of published works = 719- CD ROMS = 14, Books = 68 (Textbooks = 11), book

chapters = 32, Reviewed Conference papers = 359, Reviewed Journal papers = 195, Special issues of journals = 33 and Technical reports = 18

Known languages in which Jamshidi's books have been translated: Mandarin (4), Russian (2), and French (1).

The publication is grouped into seven categories of CD ROMS, books and book chapters, technical reports, conference papers, journal papers, and special issues of journals.

# **CD ROMS**

- M. JAMSHIDI, R. Lumia, E. Tunstel, Jr., B. White, J. Malone, and P. Sakimoto, <u>Proceedings NASA URC Conference on Education, Earth, Environment and Space</u>, Vol. 1, ACE Center Series, Albuquerque, NM: ACE Center, 1997.
- 2. M. JAMSHIDI, C. W. de Silva, F. Pierrot, M. Fathi and M. Kamel, <u>*Proceedings World 3<sup>rd</sup>*</u> <u>*Automation Congress*</u> - Anchorage, AK, TSI Press, Albuquerque, NM, May 1998
- M. JAMSHIDI, P. Borne, A. A. Macijewski, M. Fathi, S. Nahavandi, R. Lumia, and T. Furuhashi, *Proceedings 4<sup>th</sup> World Automation Congress* Maui, HI, USA, TSI Press, Albuquerque, NM, June, 2000
- M. JAMSHIDI, Y. Hata, F. Proctor, J. Fedemma, B. Shafai and A. Homaifar, <u>Proceedings</u> <u>5<sup>th</sup> World Automation Congress</u> – Orlando, FL, USA, TSI Press, Albuquerque, NM, June, 2002
- M. JAMSHIDI, A. Ollero, L. Foulloy, M. Reuter, A. Kamrani and Y. Hata, <u>Proceedings 5<sup>th</sup></u> <u>World Automation Congress</u> – Seville, Spain, TSI Press, Albuquerque, NM, USA, June, 2004
- M. JAMSHIDI, Y. Hata, M. Reuter, D. Cox, S. Nahavandi, J. S. Jamshidi, <u>Proceedings 6<sup>th</sup></u> <u>World Automation Congress</u> – Budapest, Hungary, TSI Press, San Antonio, TX, USA, July 2006.
- M. JAMSHIDI, W. Pedrycz, K. W. Bonfig, R. Aliev and R. Lewerenz, <u>Proceedings 7<sup>th</sup></u> <u>International Conference on Application of Fuzzy Systems and Soft Computing</u> – Siegen, Germany, September 2006.
- R. A. Aliev, K. W. Bonfig, M. JAMSHIDI, W. Pedrycz and I. B. Turksen (Eds.), <u>Proceedings 8<sup>th</sup> International Conference on Applications of Fuzzy Systems and Soft</u> <u>Computing</u>, b-Quadrat Verlag, ISBN393 3609-26-7, Helsinki, Finland, September 1-3, 2008.
- M. JAMSHIDI, Y. Hata, G. Parker, M. Reuter, M. Sadat and D. Cox, <u>Proceedings 7<sup>th</sup></u> <u>World Automation Congress</u> – Waikoloa, HI, TSI Press, San Antonio, TX, USA, September 2008.
- R. A. Aliev, K. W. Bonfig, M. JAMSHIDI, W. Pedrycz and I. B. Turksen (Eds.), <u>Proceedings 9<sup>th</sup> International Conference on Applications of Fuzzy Systems and Soft</u> <u>Computing</u>, b-Quadrat Verlag, ISBN393 3609-26-7, Prague, Czech Republic, August 26-27, 2010.
- 11. M. JAMSHIDI, Y. Hata, S. Kobashi, G. Parker, D. Andina, B. Ane, , <u>Proceedings 8<sup>th</sup></u> <u>World Automation Congress</u> – Kobe, Japan, TSI Press, Albuquerque, NM, USA, September 2010.

- M. JAMSHIDI, S. Kobashi, G. Muscato, N. Sepehri, D. Andina, and R. Valerdi, <u>Proceedings δ<sup>th</sup> World Automation Congress</u> – Puerto Vallarta, Mexico, TSI Press, Albuquerque, NM, USA, September 2012.
- 13. R. A. Aliev, K. W. Bonfig, M. JAMSHIDI, and I. B. Turksen, <u>Proc. 7<sup>th</sup> International</u> <u>Conference on Soft Computing, Computing with Words and Perceptions in System</u> <u>Analysis, Decision and Control</u>", Izmir, Turkey, September 2-3, 2013.
- 14. R. A. Aliev, K. W. Bonfig, M. JAMSHIDI, W. Pedrycz and I. B. Turksen (Eds.), <u>Proceedings 10<sup>th</sup> International Conference on Applications of Fuzzy Systems and Soft</u> <u>Computing</u>, b-Quadrat Verlag, Paris, France, August 26-27, 2014.

**BOOKS** (see site <u>http://wacong.org/freepublicationsbymojamshidi/</u> for free selected books and of the author)

- J. M. Davis and M. JAMSHIDI, <u>Solution Manual of Engineering of Dynamic Systems</u> (W. R. Perkins and J. B. Cruz, Jr.) John Wiley and Sons, Inc. New York, NY, 1969.
- 2. M. JAMSHIDI, An*alog Simulation of Dynamic Processes*, University of Illinois, School of Engineering Publications Office, Urbana, IL., 1971.
- 3. M. JAMSHIDI and M. H. Nehrir, *Proceedings 4th Iranian Conference* (1st Congress) on Electrical Engineering, (eds.) Volume 1, Shiraz, Iran, Shiraz University Press, May, 1974
- 4. M. JAMSHIDI and M. H. Nehrir, *Proceedings 4th Iranian Conference* (1st Congress) on Electrical Engineering, (eds.) Volume 2, Shiraz, Iran, Shiraz University Press, May, 1974
- 5. M. JAMSHIDI, *Large-Scale Systems Modeling and Control*, Elsevier North- Holland, New York, NY, 1983.
- M. JAMSHIDI, <u>Large-Scale Systems Modeling and Control</u>, Elsevier North- Holland, New York, NY, 1983. Russian Edition, see <u>http://urss.ru/cgibin/db.pl?lang=en&page</u>= Book&id=107181
- 7. M. JAMSHIDI, *Large Scale Systems Modeling and Control*, (Chinese Edition) Science Publishers, Beijing, P. R. China, 1986.
- 8. M. JAMSHIDI and C. J. Herget, *Computer-Aided Control System Engineering*, eds., North-Holland, Amsterdam, 1985.
- M. JAMSHIDI and C. J. Herget, <u>Computer-Aided Control Systems Engineering</u>, Majinostroni Publishing House, (Russian Edition) Moscow, USSR, 1989, this translation sold 20,000 copies in USSR.
- 10. M. JAMSHIDI and M. Malek-Zavarei, *Linear Control Systems A Computer- Aided Approach*, Pergamon Press, Oxford, England, 1986.
- 11. M. JAMSHIDI and M. Malek-Zavarei, *Linear Control Systems A Computer Aided Approach*, NAI Press, (Chinese Edition) Beijing, P. R. China, 1989.
- 12. Malek-Zavarei and M. JAMSHIDI, *<u>Time Delay Systems: Analysis, Optimization and Applications</u>, North-Holland Amsterdam, The Netherlands 1987.*
- 13. M. JAMSHIDI, J. Y. S. Luh, and M. Shahinpoor, <u>ADVANCES IN ROBOTICS: Modeling,</u> <u>Control and Education</u>, eds., Elsevier Publishing Co., New York, 1986.
- 14. M. JAMSHIDI, J. Y. S. Luh, H. Seraji, and G. P. Starr, <u>ROBOTICS AND</u> <u>MANUFACTURING: Recent Trends in Research, Education, and Applications</u>, eds., vol. 2, ASME Press, New York, NY, 1988.

- 15. M. JAMSHIDI, M. Tarokh\*, and B. Shafai, <u>Computer-Aided Analysis and Design of</u> <u>Linear Control Systems</u>, Prentice Hall, Englewood Cliffs, NJ, 1992.
- M. JAMSHIDI and M. Saif, <u>ROBOTICS AND MANUFACTURING: Recent Trends in</u> <u>Research, Education, and Applications</u>, (eds.), vol. 3, ASME Press, New York, NY, 1990.
- M. JAMSHIDI, M. Ahmadi, and M. Nahvi, (eds.) <u>Circuits, Systems, and Information</u>, TSI Press, Albuquerque, NM, 1991.
- M. JAMSHIDI and P. J. Eicker, (eds.) <u>Robotics and Remote Systems</u>, U.S. Government Printing Office, Washington, DC. Feb. 1991.
- M. JAMSHIDI, M. Shahinpoor and J. H. Mullins, (eds.) <u>Environmentally Conscious</u> <u>Manufacturing</u>, ECM Press, Vol. 1, Albuquerque, NM, 1992.
- 20. M. JAMSHIDI and C. J. Herget, <u>Advances in Computer-Aided Control System Analysis</u> <u>and Design</u>, Eds. North-Holland, Amsterdam, The Netherlands 1992.
- M. JAMSHIDI and P. J. Eicker, (eds.) <u>Robotics and Remote Systems in Unstructured</u> <u>Environments</u>, Englewood Cliffs, NJ: Prentice Hall, 1993.
- M. JAMSHIDI, N. Vadiee, and T. Ross, (eds.) <u>Fuzzy Logic and Control: Software and</u> <u>Hardware Applications</u>, Englewood Cliffs, NJ: Prentice Hall, 1993.
- M. JAMSHIDI, R. Lumia, J. Mullins, and M. Shahinpoor, <u>Robotics and Manufacturing:</u> <u>Recent Trends in Research, Education, and Applications</u>, (eds.), Vol. 4, ASME Press, New York, NY, 1992.
- 24. M. JAMSHIDI, M. Mansour, B. D. O. Anderson, and N. K. Bose (eds.) *Fundamentals of Discrete-Time Systems*, Albuquerque, NM: TSI Press, 1993.
- 25. M. JAMSHIDI and H. Parsaei, (eds.) *Design and Implementation of Intelligent* <u>Manufacturing Systems</u>, Englewood Cliffs, NJ: Prentice Hall, 1993.
- 26. M. Shahinpoor, M. JAMSHIDI, B. Granhoff, and C. Berger, (eds.) *Environmentally Conscious Manufacturing*, ECM Press, Vol. 2, Albuquerque, NM, 1994.
- F. Aminzadeh and M. JAMSHIDI, (eds.) <u>Soft Computing</u>, Englewood Cliffs, NJ: Prentice Hall, 1994.
- M. JAMSHIDI, C. C. Nguyen, R. Lumia, and J. Yuh (eds.) <u>Robotics and Manufacturing:</u> <u>Robotics Research and Applications</u>, Vol. 5, New York: ASME Press, 1994.
- 29. M. JAMSHIDI, C. C. Nguyen, R. Lumia, and J. Yuh (eds.) *Intelligent Automation and Soft Computing*, Vol. 1, Albuquerque, NM: TSI Press, 1994.
- M. JAMSHIDI, C. C. Nguyen, R. Lumia, and J. Yuh (eds.) <u>Intelligent Automation and Soft</u> <u>Computing</u>, Vol. 2, Albuquerque, NM, 1994.
- M. JAMSHIDI, <u>Large-Scale Systems: Modeling, Control, and Fuzzy Logic</u>, Englewood Cliffs, NJ: Prentice Hall, 1997.
- 32. M. JAMSHIDI, F. Pin, and P. Dauchez, *<u>Robotics and Manufacturing: Robotics Research</u> <u>and Application</u>s, Vol. 6, New York: ASME Press, 1996.*
- 33. M. JAMSHIDI, F. Pin, and F. Pierrot, *Robotics and Manufacturing: Robotics Research and Applications*, Vol. 3, Albuquerque, NM: TSI Press, 1996.
- M. JAMSHIDI, J. Yuh, and F. Pierrot (eds.) <u>Intelligent Automation and Control</u>, Vol. 4, Albuquerque, NM: TSI Press, 1996.
- 35. M. JAMSHIDI, M. Fathi, and P. Dauchez (eds.) *Soft Computing for Industry*, Vol. 5, Albuquerque, NM: TSI Press, 1996.
- M. JAMSHIDI, N. Vadiee, and T. Ross, (eds.) *Fuzzy Logic and Control: Software and* <u>*Hardware Applications*</u>, (Persian Edition), by M. Makrechi and A. Katebi, Shiraz, Iran, 1996.

- 37. M. JAMSHIDI, A. Titli, L. A. Zadeh, and S. Boverie, <u>Applications of Fuzzy Logic -</u> <u>Towards High Machine Intelligence Quotient (MI?) Systems</u>, Upper Saddle River, NJ: Prentice Hall, 1997.
- 38. M. JAMSHIDI, R. Lumia, E. Tunstel, Jr., B. White, J. Malone, and P. Sakimoto, <u>Proceedings NASA URC Conference on Education, Earth, Environment and Space</u>, Vol. 1, ACE Center Series, Albuquerque, NM: ACE Center, 1997.
- 39. M. JAMSHIDI, *Large-Scale Systems: Modeling, Control, and Fuzzy Logic*, (French Edition) Paris, France, 1999.
- 40. M. JAMSHIDI and C. W. de Silva (eds.) *Intelligent Automation and Control*, Vol. 6, Albuquerque, NM: TSI Press, 1998.
- 41. M. JAMSHIDI, F. Pierrot and M. Kamel (eds.) *<u>Robotics and Manufacturing</u>*, Vol. 7, Albuquerque, NM: TSI Press, 1998.
- 42. M. JAMSHIDI, Z. Bien and M. Fathi (eds.) <u>Soft Computing, Multimedia and Image</u> <u>Processing: Research and Applications</u>, Vol. 8, Albuquerque, NM: TSI Press, 1998.
- 43. M. JAMSHIDI, D. Kauffman and N. Vadiee <u>Proceedings of ACE-PURSUE Student</u> <u>Conference, ACE-Center Series</u>, Vol.2, Albuquerque, NM, April 19-20, 1999.
- 44. M. JAMSHIDI, P. Borne and J. S. Jamshidi (eds.) <u>Intelligent Automation and Control</u> (Proc. ISIAC 2000), Vol. 9 (Intelligent Automation and Soft Computing Series), Albuquerque, NM: TSI Press, 2000.
- 45. M. JAMSHIDI, A. A. Maciejewski, S. Nahavandi and R. Lumia (eds.) <u>Robotic and</u> <u>Manufacturing Systems: Recent Results in Research, Development and Applications</u>, (Proc. ISORA and ISOMA 2000), Vol. 10 (Intelligent Automation and Soft Computing Series), Albuquerque, NM: TSI Press, 2000.
- 46. M. JAMSHIDI, M. Fathi and T. Furuhashi (eds.) <u>Soft Computing, Multimedia and Image</u> <u>Processing: Trends, Principles and Applications</u> (Proc. IFMIP 2000 and ISSCI 2000), Vol. 11 (Intelligent Automation and Soft Computing Series), Albuquerque, NM: TSI Press, 2000.
- 47. M. JAMSHIDI, B. Turksen, A. Alieve, G. Bonfig and D. Aliew, (eds.), <u>Proceedings of</u> <u>International Conference on Soft Computing and Computing with Words</u>, Antalya, Turkey, June 12-14, 2001.
- 48. A. Zilouchian and M. JAMSHIDI, (eds.), *Intelligent Control Systems With Soft Computing Methodologies*, CRC Publishers, Boca Raton, FL, 2001.
- 49. M. JAMSHIDI, R. A. Krohling, L. dos S. Coelho and P. Fleming, *Robust Control Design Using Genetic Algorithms*, CRC Publishers, Boca Raton, FL, 2003.
- 50. M. JAMSHIDI, F. Proctor, J. Feddema and B. Shafai, (eds.) <u>Robotic, Manufacturing and</u> <u>Control Systems: Recent Results in Research, Development and Applications</u>, (Proc. ISORA, ISOMA and ISIAC 2002), Vol. 14 (Intelligent Automation and Soft Computing Series), Albuquerque, NM: TSI Press, 2002.
- 51. M. JAMSHIDI, Y. Hata and A. Homaifar, (eds.) <u>Soft Computing, Multimedia and Image</u> <u>Processing: Trends, Principles and Applications</u> (Proc. IFMIP 2002 and ISSCI 2002), Vol. 15 (Intelligent Automation and Soft Computing Series), Albuquerque, NM: TSI Press, 2002.
- 52. M. JAMSHIDI, A. Ollero, J. R. Martinez-de Dios and J. S. Jamshidi, (eds.) <u>Robotics:</u> <u>Recent Results in Research, Development and Applications</u>, (Proc. ISORA 2004), Vol. 15 (Intelligent Automation and Soft Computing Series), Albuquerque, NM: TSI Press, 2004.

- 53. M. JAMSHIDI, L. Foulloy, A. Elkamel and J. S. Jamshidi (eds.) <u>Automation and Control :</u> <u>Recent Results in Research, Development and Applications</u>, (Proc. ISIAC 2004), Vol. 16 (Intelligent Automation and Soft Computing Series), Albuquerque, NM: TSI Press, 2004.
- 54. M. JAMSHIDI, M. Reuter, D. Andina and J. S. Jamshidi, (eds.) <u>Soft Computing,: Trends,</u> <u>Principles and Application</u>s (Proc. ISSCI 2004), Vol. 17 (Intelligent Automation and Soft Computing Series), Albuquerque, NM: TSI Press, 2004.
- 55. M. JAMSHIDI,Y. Hata, A. Kamrani and J. S. Jamshidi (eds.) <u>Multimedia, Image</u> <u>Processing, Biomedicine and Manufacturing</u> (Proc. IFMIP 2004 and ISOMA 2004), Vol. 18 (Intelligent Automation and Soft Computing Series), Albuquerque, NM: TSI Press, 2004.
- 56. M. JAMSHIDI (eds.) Systems and Control, Albuquerque, NM: TSI Press, 2006.
- 57. M. JAMSHIDI, W. Pedrycz, K. W. Bonfig, R. Aliev and R. Lewerenz, <u>Proceedings 7<sup>th</sup></u> <u>International Conference on Application of Fuzzy Systems and Soft Computings</u> – Siegen, Germany, September 2006.
- 58. M. JAMSHIDI, D. Cox, S. Nahavandi and J. S. Jamshidi (eds.) <u>Robotics, Manufacturing</u> <u>and Automation – Trends, Principles and Applications</u> (Proc. ISORA 2006, ISOMA 2006 and ISIAC 2006), Vol. 19 (Intelligent Automation and Soft Computing Series), San Antonio, TX, USA: TSI Press, 2006.
- 59. M. JAMSHIDI,Y. Hata, M. Reuter and J. S. Jamshidi (eds.) <u>Image Processing</u>, <u>Biomedicine, and Soft Computing – Trends, Principles and Applications</u> (Proc. IFMIP 2006 and ISOMA 2006), Vol. 20 (Intelligent Automation and Soft Computing Series), San Antonio, TX, USA: TSI Press, 2006.
- 60. M. JAMSHIDI (ed.), <u>Systems of Systems Engineering Principles and Applications</u>, CRC Taylor & Francis Publishers, London, UK, 2008.
- 61. R. A. Aliev, K. W. Bonfig, M. JAMSHIDID, W. Pedrycz and I. B. Turksen (Eds.), <u>Proceedings 8<sup>th</sup> International Conference on Applications of Fuzzy Systems and Soft</u> <u>Computing</u>, b-Quadrat Verlag, ISBN393 3609-26-7, Helsinki, Finland, September 1-3, 2008.
- 62. M. JAMSHIDI (ed.), *System of Systems Engineering Innovations for the 21<sup>st</sup> Century*, John Wiley & Sons, Publishers, New York, NY, 2009.
- T. Nanayakkara, F. Sahin and M. JAMSHIDI, <u>Intelligent Control Systems with an</u> <u>introduction to System of Systems</u>, Volume 2, CRC-Taylor Francis Series on System of Systems Engineering (M. JAMSHIDI, Ed.), CRC – Taylor & Francis Publishers, London, UK, 2010.
- 64. R. A. Aliev, K. W. Bonfig, M. JAMSHIDI, W. Pedrycz and I. B. Turksen (Eds.), <u>Proceedings 9<sup>th</sup> International Conference on Applications of Fuzzy Systems and Soft</u> <u>Computing</u>, b-Quadrat Verlag, ISBN393 3609-26-7, Prague, Czech Republic, August 26-27, 2010.
- 65. R. A. Aliev, K. W. Bonfig, M. JAMSHIDI, W. Pedrycz and I. B. Turksen (Eds.), <u>Proceedings 10<sup>th</sup> International Conference on Applications of Fuzzy Systems and Soft</u> <u>Computing</u>, b-Quadrat Verlag, ISBN393 3609-26-7, Lisbon, Portugal, August 29-30, 2012.
- 66. R. A. Aliev, K. W. Bonfig, M. JAMSHIDI, and I. B. Tukesen, <u>Proceeding 7<sup>th</sup> International</u> <u>Conference on Soft Computing, Computing with Words and Perceptions in System</u> <u>Analysis, Decision and Control</u> b-Quadrat Verlag, ISBN393 3609-32-1, Seigen, Germany, 2013.

- 67. M. JAMSHIDI (ed.), *Systems of Systems Engineering Principles and Applications*, Mandarin Version, China Machine Press, Beijing, China, 2013.
- 68. M. JAMSHIDI, V. Kreinovitch and J. Kacprzyk (Eds.), "Advance Trends in Soft Computing," Springer-Verlag, Germany, 2013.

# **BOOK CHAPTERS**

- 1. M. JAMSHIDI, "Introduction to Large-Scale Systems," in *Systems Modeling and Computer Simulation*, N. Kheir (ed.), Marcel Dekker, Inc., New York, NY, 1987.
- 2. M. JAMSHIDI, "Large-Scale Systems An Expository Look," *Encyclopedia of Physical Sciences and Technology*, Academic Press, Inc., San Diego, CA, 1986 and 1992.
- 3. M. JAMSHIDI, "Large-Scale Systems," McGraw Hill, New York, *Encyclopedia of Science and Technology*, New York, 6<sup>th</sup> Edition, 1989.
- C. Abdallah, D. Dawson, P. Dorato, and M. JAMSHIDI, "<u>Techniques for the robust control</u> <u>of rigid robots</u>," in Control and Dynamic Systems, C. T. Leondes (ed.), vol. 53, Academic Press, 1992, pp. 387-426..
- R. L. Colbaugh and M. JAMSHIDI "Adaptive impedance control of solid waste handling robots, " in <u>Robotics and Remote Systems in Unstructured Environments</u>, M. Jamshidi and P. Eicker (Eds.), Prentice Hall, Englewood Cliffs, NJ, 1993.
- M. JAMSHIDI, "Introduction to Fuzzy Logic and Control, in "*Fuzzy Logic and Control:* <u>Software and Hardware Applications</u>, M. Jamshidi, et al. (eds.), Englewood Cliffs, NJ: Prentice Hall, 1993.
- M. JAMSHIDI, R. Marchbank, K. Bissett, R. Kelsey, D. Barak, and S. Baugh., "Computer-Aided Design of Fuzzy Control Systems," in <u>Advances in Computer -Aided Control</u> <u>Systems</u>, M. Jamshidi and C. J. Herget (eds.), North Holland, Amsterdam, 1 993, pp. 81-126.
- M. JAMSHIDI, "Fuzzy Logic Software and Hardware", in *Fuzzy Logic and Control:* <u>Software and Hardware Applications</u>, M. Jamshidi, et al. (eds.), Englewood Cliffs, NJ: Prentice Hall, 1993.
- 9. M. JAMSHIDI, "CAD Techniques in Control Systems, in *Advances in Digital Control Systems*," vol. 79, C. T. Leondes (ed.), Academic Press, 1996, pp. 247-346.
- M. JAMSHIDI, On Software and Hardware Applications of Fuzzy Logic, in "*Fuzzy Logic Fundamentals*, R. Yager and L. A. Zadeh (eds.), New York, NY: Plenum Publishers, 1993.
- M. JAMSHIDI," On Fuzzy Control of Non-Chlorofuorcarbon Air Conditioning Systems," <u>Intelligent Control Systems</u>, J. Yen, R. Langari and L. A. Zadeh (eds.) IEEE Press, 1994.
- M. JAMSHIDI, "Large-Scale Systems an Introduction," in <u>Systems Modeling and</u> <u>Computer Simulation</u>, N. Kheir (ed.), 2nd edition, Marcel Dekker, Inc., New York, NY, 1993.
- M. JAMSHIDI, R. Marchbank, R. Kelsey\*, K. Kumbla\*, E. Krijstansson\*, and D. Barak\*, "Hardware Applications of Fuzzy Logic Control, in "*Soft Computing*, F. Aminzadeh and M. Jamshidi (eds.), Englewood Cliffs, NJ, Prentice Hall, 1994.
- Chr. Schmid and M. JAMSHIDI, "CADACS for System Analysis, Synthesis, and Real-Time Control", in Chapter 51 of <u>The Handbook of Software for Engineers and Scientists</u>, P. Ross (ed.), CRC Press, Inc., Boca Raton, FL, 1996.
- 15. E. Tunstel<sup>\*\*</sup>, and M. JAMSHIDI, "Intelligent Control and Evolution of Mobile Robot Behavior", to appear as Chapter 6 in Jamshidi, Titli, Zadeh, & Boverie (Eds.) <u>Applications</u>

of Fuzzy Logic: Towards High Machine Intelligence Quotient Systems, Vol. 9, Prentice-Hall Series on Environmental & Intelligent Manufacturing Systems, 1997.

- R. D. Colbaugh, Baca, J., and JAMSHIDI, M., "Adaptive Compliant Motion Control for Robotic Waste management Applications," <u>Waste Management: From Risk to</u> <u>Remediation</u>, Vol. 1, Bhada (ed.), Albuquerque, NM: ECM Press, 1994.
- 17. M.-R. Akbarzadeh-T. \*, JAMSHIDI, M., chapter in *Proceedings of the Applied Computing* Symposium on Applied Computing, Nashville, Tennessee, 1995.
- A. Jadbabaie,\*, C. Abdallah, A. Titli, and M. JAMSHIDI, "Observer-Based Controller Synthesis for Model-Based Fuzzy Systems via Linear Matrix Inequalities" in <u>Intelligent</u> <u>Control</u>, R. Langari (ed.), IEEE Press. New York, 1999
- M. JAMSHIDI, "Autonomous Complex Systems", McGraw Hill, New York in <u>Encyclopedia of Science and Technology</u>, 7<sup>th</sup> Edition, 1998.
- 20. E. Tunstel\*\* and M. JAMSHIDI, "Intelligent Control and Evolution of Mobile Robot Behavior", Chapter 1 in JAMSHIDI, Titli, Zadeh and Boverie (Eds.), <u>Applications of Fuzzy</u> <u>Logic: Towards High Machine Intelligence Quotient Systems</u>, Vol. 9, Prentice Hall Series on Environmental and Intelligent Manufacturing Systems, M. JAMSHIDI, Series (ed.), 1997.
- 21. M. JAMSHIDI, "Fuzzy Sets and Logic" in *Encyclopedia of Arts and Sciences*, London, UK, 1998.
- 22. 22. A. El-Osery\* and M. JAMSHIDI "Color image enhancement: Statistical versus fuzzy expert Systems Approaches," A Chapter in Ross, Booker and Parkinson (eds.) <u>Fuzzy Logic</u> <u>and Probability Applications.</u> SIAM, 2002., Chapter 7, pp. 127-144.
- 23. M. JAMSHIDI, "Soft Computing Control of Complex Systems," Chapter 6, *Intelligent Machines*, CRC Publishers, Boca Raton, FL, pp. 193-214, C. W. de Silva, Ed., 2000.
- M. JAMSHIDI, "Autonomous Control of Complex Systems by Soft Computing," in <u>Intelligent Systems - Myths and Realities</u>, Chapter 6, C. W. de Silva (Ed.), Boca Raton, FL: CRC Press, 2000.
- 25. M. JAMSHIDI and A. El-Osery, "Introduction to Fuzzy Sets: Basic Definitions and Relations," <u>Intelligent Control Systems based on Soft Computing Methodologies</u>, A. Zilouchian and M. JAMSHIDI (eds.), Chapter 8, CRC Publishers, Boca Raton, FL, 2001.
- 26. M. JAMSHIDI, A. El-Osery and T. J. Ross, "Introduction to Fuzzy Logic," in <u>Intelligent</u> <u>Control Systems based on Soft Computing Methodologies</u>, A. Zilouchian and M. JAMSHIDI (eds.), Chapter 9, CRC Publishers, Boca Raton, FL, 2001.
- 27. M. JAMSHIDI and A. El-Osery, "Fuzzy Control Systems and their Stability," in <u>Intelligent</u> <u>Control Systems based on Soft Computing Methodologies</u>, A. Zilouchian and M. JAMSHIDI (eds.), Chapter 10, CRC Publishers, Boca Raton, FL, 2001
- 28. A. El-Osery and M. JAMSHIDI, "Image enhancement using a fuzzy logic approach," in <u>Intelligent Control Systems based on Soft Computing Methodologies</u>, T. Ross, W. J. Parkinson and J. (eds.), Chapter 12, SIAM Publishers, , FL, 2003.
- A. Jevtic, D. Andina and M. JAMSHIDI, "Distributed Task Allocation in Swarms of Robots," Chapter in "<u>Swarm Intelligence for Electric and Electronic Engineering</u>," G. Fornarelli and L. Mescia (eds.), IGI Global, Hershey, Pennsylvania Publishers, USA. (Web: <u>www.igi-global.com</u>), 2012.
- M. JAMSHIDI, "Introduction to System of systems engineering," Chapter 1, in <u>System of</u> <u>Systems Engineering – Principles and Applications</u>, (M. Jamshidi, ed.), China Machine Press, Beijing, China, pp. 1-28, 2013 (In Mandarin).

- F. Sahin, M. JAMSHIDI, and P. Sridhar\*, "A System of Systems simulation framework and its applications," Chapter 4, in <u>System of Systems Engineering – Principles and</u> <u>Applications</u>, (M. Jamshidi, ed.), China Machine Press, Beijing, China, pp. 77-98, 2013 (In Mandarin).
- 32. F. Sahin, B. Horan\*, S. Nahavandi, V. Raghavan\*, and M. JAMSHIDI, "System of autonomous rovers and their applications," Chapter 14, in <u>System of Systems Engineering –</u> <u>Principles and Applications</u>, (M. Jamshidi, ed.), China Machine Press, Beijing, China, pp. 301-315, 2013 (In Mandarin).

## **TECHNICAL REPORTS**

- M. JAMSHIDI, "A New Design Technique of Sub-Optimal Automatic Control Systems Design Using Sensitivity Functions," Coordinated Science Laboratory <u>CSL Report R-405</u>, University of Illinois. Urbana, IL., January, 1969.
- M. JAMSHIDI and P. V. Kokotovic, "An Approximation of Force-Torque Equations in Rolling Mills," <u>CSL Report R-452</u>, University of IL., Urbana, IL., January, 1970.
- 3. M. JAMSHIDI and P. V. Kokotovic, "Dynamic Model of a Cold Rolling Mill," <u>CSL Report</u> <u>R-459</u>, University of Illinois, Urbana, IL., February, 1970.
- 4. M. JAMSHIDI, "An Integrated Near-Optimum Design of Cold Rolling Mills," <u>CSL Report</u> <u>R-499</u>, University of Illinois, Urbana, IL., January, 1971.
- 5. M. JAMSHIDI, "Optimization of Water Resources Systems with Statistical Inflows," <u>IBM</u> <u>Research Report RC-5720</u>, Yorktown, NY, November, 1975.
- 6. M. JAMSHIDI, "Some Computational Algorithms for the Solution of the Matrix Riccati Equations," *IBM Research Report RC-5974*, Yorktown Heights, NY, May, 1976.
- 7. M. JAMSHIDI, "An Imbedded Initialization of Newton's Algorithm for Matrix Riccati Equation," *IBM Research Report RC-5974*, Yorktown Heights, NY, May 1976.
- 8. M. JAMSHIDI, "An Input-Output Energy Model for Denmark," *Technical Report*, Electric Power Engineering Dept., Technical University of Denmark, Lyngby, Denmark, July, 1977.
- M. JAMSHIDI and P. Cueno\*, "TIMDOM/PC-User's Guide Software for Multivariable Control Systems," <u>Technical Report No. LCAD - 84 - 01</u>, Laboratory for Computer-Aided Design of Systems and Networks, EECE Department, The University of New Mexico, Albuquerque, NM April, 1984.
- M. JAMSHIDI, "NONLIN-CTR... A Computer Aided Design Package for Non-Linear Systems," <u>Report, General Motors Research Laboratories</u>, Electronics Department, Warren, MI, August, 1984.
- M. JAMSHIDI and R. Banning\*, "LSSPAK/PC User's Guide Software for Large Scale Control Systems," <u>Technical Report No. LCAD - 85 - 01</u>, CAD Laboratory for Systems / Networks, EECE Department, University of New Mexico, Albuquerque, NM January, 1985.
- J. L. Schotik\*, M. JAMSHIDI, and T. C. Yenn\*, "<u>CONTROL.Lab User's Guide A CAD</u> <u>Language for Multivariable Control and Kalman Filtering</u>," Technical Report No. LCAD-85-02, CAD Laboratory for Systems / Robotics, EECE Department, University of New Mexico, Albuquerque, NM, March, 1985.

- M. JAMSHIDI, "TIMDOM/PC User's Guide A CAD Package for Multivariable Control," <u>*Technical Report No. LCAD-85-04*</u>, CAD Laboratory for Systems/ Robotics, EECE Department, University of New Mexico, Albuquerque, NM, July, 1985.
- M. JAMSHIDI, "FREDOM/PC A Preliminary Guide to Operation," <u>Technical Report</u> <u>LCAD 86-01</u>, CAD Laboratory for Systems / Robotics, UNM, Albuquerque, NM, 1986.
- F. KIA\* and M. JAMSHIDI, "POLPAC/PC User's Guide A CAD Package for Pole Placement," Tec<u>hnical Report No. LCAD-86-04, May</u>, 1986.
- 16. M. JAMSHIDI and G. L. Schotik\*, "<u>CONTROL.Lab A CAD Language for Systems</u> <u>Engineering," Technical Report No. 87-01</u>, CAD Lab. Systems / Robotics, EECE Dept., UNM, Albuquerque, NM, January, 1987.
- M. JAMSHIDI, J. A. Meinhardt\*, R. A. Carreras\*\*, and M. G. Baciak, "Model Reference Adaptive Control of a Phased-Array Telescope," <u>CAD Lab. Report LCAD-88-03</u>, UNM, Department of EECE, Albuquerque, NM, December, 1988.
- W. Horne\*, K. Smith, B. McClung\*, and M. JAMSHIDI, "A Connection Network for Robotic Gripper Control," <u>*Technical Report LCAD-88-02*</u>, CAD Lab. Systems / Robotics, EECE Dept., University of New Mexico, Albuquerque, NM, August, 1988

## SPECIAL ISSUES OF TECHNICAL JOURNALS

(\* Graduate Student, \*\* Minority Graduate Student)

- 1. M. JAMSHIDI and C. J. Herget, (eds.), Special Issue on Computer-Aided Control Systems Engineering, *IEEE Control Systems Magazine*, Vol. 2, No. 4, November, 1982.
- 2. M. JAMSHIDI, G. S. Axelby, O. I. Franksen, and N.B. Nichols, (eds.), Special IEEE Centennial Issue, *IEEE Control Systems Magazine*, Vol. 4, No. 4, November, 1984.
- 3. M. JAMSHIDI, (ed.) Special Issue on "Multi-Arm Robotics," Robotics and Autonomous Systems, Guest Editor, vol. 5, no. 4, 1989.
- 4. M. JAMSHIDI, (ed.) Special Issue on "Robots in Unstructured Environments," <u>J. of</u> <u>Robotics and Automation</u>, Guest Editor,1990.
- 5. M. JAMSHIDI, (ed.) Special Issue on "Fixed and flexible robots," *Journal . Robotic Systems*, Vol. 6, no. 4, 1989.
- 6. M. JAMSHIDI, (ed.) Special Issue on "Robots in Manufacturing," <u>*Robotics and Computer*</u> <u>Integrated Manufacturing</u>, Guest Editor, Vol. 6, No. 4, 1989.
- 7. M. JAMSHIDI, (ed.) Special Issue on "Intelligence in Robotics and Manufacturing," Guest Editor, *J. of Intelligent and Robotic Systems*, Vol. 3, No. 1, 1990.
- 8. M. JAMSHIDI and V. Salminen (eds.) Special Issue on "Mechatronics," *Int. J. Computers & Electrical Engineering*, Vol. 18, No. 3., 1992.
- R. Lumia and M. JAMSHIDI, (eds.) Special Issue on "Robotics and Manufacturing Research at National Institute for Standards and Technology," <u>J. Intelligent and Robotics</u> <u>Systems</u>, Vol. 4, 1992.
- 10. M. JAMSHIDI and M. Bayoumi, (eds.) Special Issue on "Robot Control Position, Force, and Impedance, " *J. Intelligent and Robotics Systems*, Vol. 5, 1993.
- 11. M. JAMSHIDI and C. Gosselin, (eds.) Special Issue on "Trends in Robot Kinematics, Dynamics, and Control, " *J. Robotics and Autonomous Systems*, 1992.

- 12. M. JAMSHIDI (ed.) Special Issue on "Robots in Radioactive and Biochemical Waste Management," *J. Robotics and Autonomous Systems*, 1992.
- M. JAMSHIDI, D. Cherchas, and R. D. Colbaugh (eds.) Special Issue on "Flexible and Redundant Robots," <u>J. Robotics and Computer-Integrated Manufacturing</u>, Vol. 9, No. 2, 1992.
- 14. M. JAMSHIDI (ed.) Special Issue on "Robotics and CIM Education and Research," <u>J.</u> <u>Robotics and Computer-Integrated Manufacturing</u>, 1992.
- 15. M. JAMSHIDI and R. D. Colbaugh (eds.) Special Issue on "Redundant Robots, " <u>J.</u> <u>*Robotic Systems*</u>, 1993.
- 16. M. JAMSHIDI and S. Hayati (eds.) Special Issue on "Robots in Unstructured Environments, " *J. Robotic Systems*, 1992.
- 17. M. JAMSHIDI (ed.) Special Issue on "Intelligent Robotic and Manufacturing Systems, "<u>J.</u> <u>Expert Systems and Applications</u>, 1992.
- 18. M. JAMSHIDI (ed.) Special Issue on "Automation in Manufacturing Systems," *Int. J. Systems Automation Research and Applications*, 1992.
- 19. M. JAMSHIDI and P. Dauchez, (eds.) Special Issue on "Parallel and Multiple Manipulators, " *Int. J. Robotics and Automation*, 1993.
- White, R. Brittain, R. Kisner, and M. JAMSHIDI, (eds.) Special Issue on "Advance Control Architectures for Nuclear Reactor," <u>Control Theory and Advanced Technologies</u>, Vol. 8, September, 1992.
- M. JAMSHIDI and C. C. Nguyen, (eds.) Special Issue on "Parallel Robots and Mechanisms, "*Journal of Robotic Systems*, 1993.
- 22. M. JAMSHIDI, (ed.) Special Issue on "Environmental and Intelligent Manufacturing Systems" *Journal of Intelligent Manufacturing*, 1994.
- M. JAMSHIDI Special Section on "Advances in Laboratory Robotic Automation," <u>Journal of Laboratory Robotic Automation</u>, Vol. 6, 1994.
- 24. M. JAMSHIDI (ed.) Special Issue on "Intelligent Robotics and Manufacturing, "<u>J.</u> <u>Robotics and Computer-Integrated Manufacturing</u>, 1994.
- 25. M. JAMSHIDI, F.-Y. Wang, and Z. Geng\*, (eds.) Special Issue on "Intelligent Systems Architecture, " *Journal of Intelligent and Fuzzy Systems*, Vol. 2, 1994.
- M. JAMSHIDI (ed.) Special Issue on "Parallel and Multi-Arm Robotic Systems," <u>J.</u> <u>Robotics and Autonomous Systems</u>, 1994.
- 27. M. JAMSHIDI (ed.) Special Issue on "Mobile, Redundant, and Telerobots Control, "*Journal of Robotica*, 1995.
- E. Tunstel\*\* and M. JAMSHIDI, Guest Editors, Special Issue on Autonomous control Engineering at the NASA ACE Center, <u>Intelligent Automation and Soft Computing -</u> <u>AutoSoft</u>, Vol. 3, No. 1, 1997.
- M. Kamel and M. JAMSHIDI, (eds.) Special Issue on "Distributed Intelligent Systems," <u>Journal of Intelligent Automation and Soft Computing</u>, Vol. 6, No. 3, 2000, pp. 171-172.
- 30. M. Kamel and M. JAMSHIDI, (eds.) "Intelligent Agents," Intelligent Manufacturing, 2000.
- M. JAMSHIDI and J. Johnson III, "Science and Technology Research at NASA University Research Centers," *Int. Journal of Computers and Electrical Engineering*, Vol. 26, No. 1, 2000.
- M. Jamshidi (Ed.), "Special Issue on 6-decades of Contributions of Professor Lotfi A. Zadeh to Science, Emerging Technology and Academic Leadership," *Iranica Scientia*, Vol. 18, No. 3-D1, 2011.

33. M. Jamshidi, H. Berenji, and S. Shahbazova (eds.), "Special Issue on Fuzzy Set Theory and Applications- dedicated to Lotfi Zadeh," Applied and Computational mathematics, Vol. 10, 2011, Vol. 10, 2011.

## **REVIEWED CONFERENCE PAPERS**

- (\* Graduate Student, \*\* Minority Graduate Student)
  - 1. Jamshidi, "A Near-Optimal Controller for Nonlinear Systems," <u>*Proc. 7th Allerton Conf.,*</u> Monticello, IL., October 1969.
  - 2. Hadlock, M. Jamshidi and P. Kokotovic, "A Near-Optimum Design of Three Time-Scale Systems," Proc. 4th Princeton Conf., Princeton, NJ, March, 1970.
  - 3. V. Kokotovic and M. Jamshidi, "Optimal Tension Regulation of a Strip Winding Process," *Proc. 1970 JACC*, Atlanta, GA, June, 1970, pp. 1-6.
  - 4. D'Ans, Y. Hontoir and M. Jamshidi, "Manifold-Imbedding Solution of Optimal Control Problems," *Proc. 8th Allerton Conf.*, Monticello, IL., October, 1970.
  - V. Kokotovic and M. Jamshidi, "Optimal Control of Cold Rolling Mills," <u>Proc. 3rd</u> <u>IFAC/IFIP Conf. on Digital Computer Control of Industrial Processes</u>, Helsinki, Finland, June, 1972.
  - 6. Herbrik and M. JAMSHIDI, "Design of an Optimal Regulator for a Once-through Boiler," *Proc. 5th World IFAC Congress*, Paris, France, June, 1972.
  - 7. M. JAMSHIDI, "Sub-Optimal Control of Coupled Time-Delay Systems," *Proc. 10th Allerton Conf.*, Monticello, IL., October, 1972.
  - 8. M. JAMSHIDI, "On the Imbedding Solution of a CSTR Process by Hybrid Computer," <u>Proc. 1st Iranian Congress on Chemical Engineering</u>, Shiraz, Iran, May, 1973 (Elsevier Publishers, Amsterdam, the Netherlands)
  - 9. M. JAMSHIDI, "On the Optimal Control of Nonlinear Power Systems," <u>Proc. IFAC Symp.</u> <u>Control in Power Electronics and Electrical Derives</u>, Deusseldorf, FRG., October, 1974.
  - M. JAMSHIDI, "A Systematic Approach to Near Optimum Design of Nonlinear Time-Delay Systems," *Proc. 12th Allerton Conf., Monticello*, IL., October, 1974.
  - M. JAMSHIDI, "On the Analog/Hybrid Simulation of Prey-Predator Systems," <u>Proc. AICA</u> <u>Symposium on Hybrid Computation and Dynamic Systems Design</u>, Rome, Italy, November, 1974.
  - 12. M. JAMSHIDI, "On the Analog Simulation of Mathematical Programming Problems," *Proc. Simulation 75*, Zurich, Switzerland, June, 1975.
  - 13. M. JAMSHIDI, "Optimal Control of Some Dynamic Operations Research Processes by Analog Computer" *Proc. Simulation* 75, Zurich, Switzerland, June, 1975.
  - M. JAMSHIDI and M. Mohseni, "On the Optimization of Water Resources Systems with Statistical Inputs," <u>Proc. 2nd IFIP Working Conf., on Biosystems Simulation in Water</u> <u>Resources and Waste Water Problems</u>, Gent, Belgium, September, 1975.
  - 15. M. JAMSHIDI and M. Heidari, "Modeling and Optimization of Khuzestan Water Resources Systems," *Proc. 6th World IFAC Congress*, Boston, MA, August, 1975.
  - 16. M. JAMSHIDI and M. H. Nehrir, <u>Proceedings 4th Iranian Conference (1st Congress) on</u> <u>Electrical Engineering</u>, (Eds.) Shiraz, Iran, May, 1974.

- M. JAMSHIDI and M. Razzaghi, "On the Imbedded Solution of Linear Singular Control Problems with Delay" <u>Proc. 13th Allerton Conf.</u>, Monticello, IL, October, 1975.
- M. JAMSHIDI and F. Boettiger, "On the Imbedded Solutions of the Algebraic Matrix Riccati Equations," *Proc. 1976 JACC*, W. Lafayette, IN, July, 1976.
- J. Peters, K. C. Chu and M. JAMSHIDI, "Optimization of a Water Resources System by Stochastic Programming with Resource and Linear Rules," <u>Proc. IIX Int. Sym. on</u> <u>Mathematical Programming</u>, Budapest, Hungary, August, 1976.
- U. Ozguner and M. JAMSHIDI, "Multi-Time Scale Analysis and Control in Microeconomics," <u>Proc. IFAC/IFORS/IASA Conf. on Dynamic Modeling and Control of</u> <u>National Economies</u>, Vienna, Austria, January, 1977.
- M. JAMSHIDI and U. Ozguner, "An Optimal Adaptive Policy for Long-Term Economic Stabilization Problem," <u>Proc. IFAC/IFORS/IASA Conf. On Dynamic Modeling and Control</u> <u>of National Economies</u>, Vienna, Austria, January, 1977.
- M. JAMSHIDI and I. Vakilzadeh, "On some of the Problems with Control Education in Developing Countries," <u>Proc. IFAC Sym. on Trends in Automatic Control Education</u>, Barcelona, Spain, March, 1977.
- 23. K.C. Chu, M. JAMSHIDI and R. E. Levitan, "Real-Time Urban Power Dispatch with Ambient Air Equality Constraints," <u>Proc. IFAC Sym. On Environmental Systems Planning</u>, <u>Design and Control</u>, August, 1977, Kyoto, Japan.
- M. JAMSHIDI, "A Large Scale Stochastic Model for Optimal Management of Khuzestan Water Resources System," <u>Proc. IFAC Conf. On Systems Approaches for Development</u>, Cairo, Egypt, November, 1977.
- J. Peters, K. C. Chu and M. JAMSHIDI, "Optimal Operation of a Water Resources System Stochastic Programming," <u>Proc. VIIth IFAC World Congress</u>, Helsinki, Finland, June, 1978.
- 26. M. JAMSHIDI and J. R. Hansen, "a Dynamic Input-Output Energy Model for Denmark," *Proc. Simulation, Modeling & Decision in Energy System*, Montreal, Canada, June, 1978.
- M. JAMSHIDI, and R. J. Heggen, "A multi-level stochastic management model for optimal conjunctive use of ground and surface water," <u>Proc. IFAC Symposium Water & Land</u> <u>Related Resources Systems</u>, May 1980, Cleveland, OH.
- 28. M. JAMSHIDI and S. Karni, "Resource sensitivity and stochastic input/output modeling of energy systems," (invited paper), *1980 Optimization Days*, Montreal, Canada, May 1980.
- 29. M. JAMSHIDI and R. J. Heggen, "Optimal management of water resources systems: A survey," (invited paper), *1980 Optimization Days*, Montreal, Canada, May 1980.
- M. JAMSHIDI and M. Malek-Zavarei, "A Hierarchical optimization method of large-scale time-delay systems," *Proc. 20th IEEE CDC*, San Diego, CA, Dec. 16-18, 1981.
- 31. M. JAMSHIDI, "An overview on the aggregation of large-scale systems," *Proc. VIII IFAC* <u>*Congress*</u>, Kyoto, Japan, Aug. 24-28, 1981, paper no. 44.1.
- 32. M. JAMSHIDI, "On the reduction of large-scale systems in the frequency domain," <u>Proc.</u> <u>24th Midwest Symposium</u>, Jun. 29-28, 1981, Albuquerque, NM, paper no. TA4.1.
- 33. R. J. Heggen and M. JAMSHIDI, "A Hierarchical control algorithm for water resources systems," *Proc. IASTED Conf.*, Geneva, Switzerland, Feb. 1981.
- M. JAMSHIDI and J. E. Merryman,\*\* "On the hierarchical optimization of retarded systems via costate prediction," <u>*Proc. ACC*</u>, vol. 3, no. 3, pp. 899-904, Arlington, VA, Jun. 1982.

- M. JAMSHIDI and C. M. Wang,\* "A computational algorithm for large-scale nonlinear time-delay systems," <u>Proc. 1st IEEE Symposium on Large-Scale Systems</u>, Virginia Beach, VA, Oct. 1, 1982.
- M. JAMSHIDI and F. Asamoah,\*\* "On exponential stabilization of a class of large-scale bilinear systems," <u>Proc. 1st Symposium on Large-Scale Systems</u>, Virginia Beach, VA, Oct. 1982.
- T. Portas\* and M. JAMSHIDI, "A computer-based hierarchical model for a large-scale energy system," <u>Proc. 3rd IFAC/IFORS</u>, Warsaw, Poland, Jul. 1983.
- 38. R. E. Salters\*\* and M. JAMSHIDI, "Two interactive programming packages for control systems," *Proc IEEE MIT (CAD) Symposium*, Cambridge, MA, 1983.
- 39. Morel\*\* and M. JAMSHIDI, "Two interactive programming packages for control systems," *Proc. IEEE / MIT (CAD) Symposium*, Cambridge, MA, 1983.
- M. JAMSHIDI, R. E. Owen,\* and J. E. Cunningham, Jr., "Modeling and simulation of photoconductor discharge voltage control system," *Proceedings IBM Workshop on* <u>Electrophotographic Printhead Systems</u>, Jul. 28-29, 1983, Boulder, Co.
- 41. M. Santiago,\*\* J. W. Lange,\* and M. JAMSHIDI, "Trends in modeling and control of large space structures," <u>Workshop on Identification and Control of Flexible Space</u> <u>Structures</u>, San Diego, CA, Jun. 4-5, 1984.
- 42. M. JAMSHIDI and C. M. Wang,\* "Optimal operation of large-scale water resources systems," *Proc. 9th IFAC Congress, Budapest, Hungary*, Jul. 2-6, 1984.
- 43. M. JAMSHIDI and C. M. Wang,\* "Hierarchical optimization of large-scale water resources systems," *Proc. First European Workshop on the Real Time Control of Large-Scale Systems*, Patras, Greece, Jul. 10-12, 1984.
- 44. M. Santiago\*\* J. W. Lange,\* Jr., and M. JAMSHIDI, "An overview of modeling and control of large flexible space-structures," <u>Proc. 9th IFAC Congress</u>, pp. 299-304, Budapest, Hungary, Jul. 2-6, 1984.
- 45. M. JAMSHIDI and M. Etezadi, "On the decentralized control of large-scale power systems," *Proc. 1984 ACC*, Jun. 6-8, 1984, pp. 1156-1161.
- 46. M. JAMSHIDI, "Problems of technical development in developing countries," <u>Proceedings</u> <u>IFAC World Congress</u>, Budapest, Hungary, 1984.
- 47. M. JAMSHIDI and S. Karni, "A hierarchical optimization of large-scale energy resources systems," *Proceedings IEEE Midwest Symposium*, Morgantown, WV, 1984.
- 48. M. JAMSHIDI, "Hierarchical optimization of large-scale time-delay systems A brief overview," *Proc. 1984 ACC*, San Diego, CA, Jun. 1984, pp. 129-134.
- 49. H. Seraji, M. Shahinpoor, and M. JAMSHIDI, "Perfect tracking with application to robotics," *Proc. Int. Conf. Robotics*, Luzanne, Switzerland, June, 1986.
- 50. J. M. Santiago\*\* and M. JAMSHIDI, "Simple extensions of the open-loop balanced approach for model reduction," *Proc. 1985 ACC*, Boston, MA, Jun. 1985.
- M. JAMSHIDI, G. L. Schotik,\* and T. C. Yenn,\* "CONTROL.lab a CAD language for multivariable control systems," *Proc. IFAC Conference on Systems Approach for* <u>Development</u>, Beijing, China, Aug. 1985.
- 52. M. JAMSHIDI, S. Karni, Y. C. Yenn,\* and G. L. Schotik,\* "Two CAD languages for control systems and electrical networks," <u>Proc. IFAC Conference on Computer-Aided</u> <u>Design</u>, Lyngby, Denmark, Jul. 1985.
- 53. H. Seraji, M. Shahinpoor and M. JAMSHIDI, "Perfect output control with applications to robotics," *Proc. IEEE Conf. Systems Man and Cybernetics*, Atlanta, GA, 1986.

- M. JAMSHIDI, H. Seraji, M. Shahinpoor, and Y. T. Kim,\* "Regulation of two-link robot manipulators," *Proc. IEEE Conference on Systems, Man and Cybernetics*, Tucson, AZ, Nov. 1985.
- 55. M. JAMSHIDI, H. Seraji, and Y. T. Kim,\* "On decentralized control of nonlinear threelink robots," *Proc. 9th Asilomar Conf.*, Nov. 1985, Monterey, CA.
- 56. M. Tarokh\* and M. JAMSHIDI, "Fixed mode elimination with minimum information exchange among controllers," *Proc. IEEE Conf. Dec. Contr.*, Athens, Greece, Dec. 1986.
- 57. M. Shahinpoor, H. Kalhor, and M. JAMSHIDI, "On magnetically activated robotic tensor arms," Proc. Int. Symp. Robot Manipulators: Modeling, Control, and Education, M. Jamshidi, et al. (eds.), Albuquerque, NM, pp. 517-512, Nov. 1986.
- 58. M. Shahinpoor and M. JAMSHIDI, "*Proc. Int. Symp. on Robot Manipulators: Modeling, Control, and Education,"* Albuquerque, NM, pp. 351-353, Nov. 1986
- 59. M. JAMSHIDI, Y. T. Kim,\* and M. Shahinpoor, "A near-optimum control of robot manipulator," *Proc. 10th World IFAC Congress*, Munich, FRG, July 26-Aug. 1.
- 60. M. Tarokh\*, B. J. Oh,\* and M. JAMSHIDI, "An iterative method for pole assignment using output feedback," *Proc. 1987 MTNS*, Tempe, AZ, June 1987.
- 61. K. W. Smith,\* W. Horne,\* B. McClung,\* A. Young,\* and M. JAMSHIDI, "Robotic control in a connection neural like environment," <u>Proc. IEEE Int. Conf. Intelligent Control</u>, Philadelphia, PA, Jan. 1987.
- 62. W. Horne,\* K. W. Smith,\* B. McClung,\* and M. JAMSHIDI, "Application-oriented connection systems for pattern acquisition and recognition," <u>Proc. IEEE Int. Conf. on</u> <u>Neural Networks</u>, San Diego, CA, Jun. 1987.
- 63. J. Oh,\* H. Seraji, and M. JAMSHIDI, "Decentralized adaptive control of robotic manipulators," *Proc. 1987 MTNS*, Tempe, AZ, Jun. 1987.
- M. Tarokh\* and M. JAMSHIDI, "On pole assignment by decentralized output feedback," <u>Proc. IEEE SMC Conference</u>, Alexandria, VA, Oct. 1987.
- 65. J. Oh\*, H. Seraji, and M. JAMSHIDI, "Decentralized adaptive control of robotic manipulators," *Proc. 1987 MTNS*, Phoenix, AZ, 1987.
- 66. J. Oh\*, and M. JAMSHIDI, "A Decentralized adaptive control of robot manipulators with feedforward loop," *Proc. IEEE SMC Conference*, Alexandria, VA, Oct. 1987.
- 67. S. Tseng\* and M. JAMSHIDI, "On robust decentralized control of a five-axis robot," *Proc.* <u>1987 MTNS</u>, Tempe, AZ, Jun. 1987.
- 68. J. Oh,\* M. JAMSHIDI, and H. Seraji, "Decentralized adaptive control," <u>Proc. IEEE Conf.</u> <u>Robotics and Automation</u>, Philadelphia, PA, Apr. 1988.
- 69. M. JAMSHIDI and C.-S. Tseng,\* "On the computer-aided modeling and control of robot manipulators-ROBOTLAB," *Proc. 4th IFAC Symp. On Computer Aided Design in Control Systems*, Beijing, P. R. China, Aug. 1988.
- 70. J. Oh \* and M. JAMSHIDI, "A decentralized adaptive control of robot manipulation," *Proc. IEEE SMC Conference*, Alexandria, VA, Oct. 1987.
- 71. R. Lee\* and M. JAMSHIDI, "On Lyapunov stability and instability of large-scale nonlinear systems with time delay," *Proc. Asilomar Conf.*, Oct., 1988, Monterey, CA.
- 72. S. O'Neill\* and M. JAMSHIDI, "Robot\_S: An interactive design and simulation language for robot manipulators," <u>Proc. 4th IFAC Symposium on CAD</u>, Aug. 1988, Beijing, P. R. China.

- 73. N. Vadiee\* and M. JAMSHIDI, "A design philosophy for multilayer artificial neural networks with applications to robot control," <u>Proc. 2<sup>nd</sup> NASA Conf. Telerobotics</u>, Pasadena, CA, Jan. 1989.
- 74. W. Horne\* and M. JAMSHIDI, "A connection network for robotic gripper control," <u>*Proc.*</u> 27th IEEE Conf. Dec. and Control, Austin, TX, Dec.1988, pp. 1070-1075.
- 75. M. JAMSHIDI and C.-S. Tseng,\* "On the computer-aided modeling and control of robot manipulators - ROBOTLAB," <u>Proc. 4th IFAC Symp. On Computer Aided Design in</u> <u>Control Systems</u>, Beijing, P. R. China, Aug. 1988.
- 76. Z. Geng\* and M. JAMSHIDI, "An expert self-learning controller for robot systems," <u>Proc.</u> <u>27th IEEE Conf. Dec. and Control</u>, Austin, TX, December, 1988, pp. 1090-1095.
- 77. Z. Geng\* and M. JAMSHIDI, "Design of self-learning controllers using expert system techniques," *Proc. 3rd IEEE Symposium on Intelligent Control*, Arlington, VA, Aug. 1988.
- 78. M. Aldeen and M. JAMSHIDI, "A new decentralized control algorithm via model reduction," *Proc. IFAC Symposium on Large-Scale Systems*, Berlin, GDR, Aug. 1988.
- 79. M. Aldeen and M. JAMSHIDI, "Decentralized control via static and dynamic compensation," *Proc. 1989 ACC*, Pittsburgh, PA.
- J. Oh\* and M. JAMSHIDI, "Decentralized adaptive feedforward/feedback robot manipulator control," <u>Proc. IFAC/IFORS/IMACS Symposium on Large-Scale Systems -</u> <u>Theory and Applications</u>, Berlin, GDR, Aug. 1989.
- M. JAMSHIDI, J. A. Meinhardt,\* R. Carreras\*\* and M. Baciak, "Adaptive control of a phased array telescope," <u>Proc. SPIE Int. Society of Optical Engineering Technical</u> <u>Symposium on Aerospace Sensing</u>, Orlando, FL, Mar., 1989.
- 82. A. Meinhardt,\* C. DeHainaut, M. JAMSHIDI, and D. Marker, "Active pupil geometry control in a phased array telescope," *Proc. SPIE-The Int. Optical Society*, Mar., 1989.
- H. Bolandi,\* R. L. Carroll, and M. JAMSHIDI, "On the discrete-time model reference adaptive control of a two-link robot," in <u>*Robotics and Manufacturing*</u>. M. Jamshidi, et al, (eds.), Vol. 2, ASME Press, 1988, pp. 203-210.
- 84. J. N. Liou,\* M. JAMSHIDI, and G. P. Starr, "On the adaptive edge-following force control of a PUMA 560 robot," in <u>*Robotics and Manufacturing*</u>, M. Jamshidi, et al, (eds.), vol. 2, ASME Press, 1988, pp. 227-236.
- 85. W. Horne\* and M. JAMSHIDI, "A connection network for robotic gripper control," in <u>*Robotics and Manufacturing*</u>, M. Jamshidi, et al, (eds.), Vol. 2, ASME Press, 1988, pp. 257-263.
- 86. Z. Geng \* and M. JAMSHIDI, "Two-dimensional system models for learning control systems," in Robotics and Manufacturing, M. Jamshidi, et al (eds.), ASME Press, vol. 2, 1988, pp. 273-280.
- J. Benitez-Read \*\*, M. JAMSHIDI, and Z. Geng \*, "On the adaptive control of a nuclear reactor," <u>Proc. 7th Power Plant Dynamics, Control and Testing Symposium</u>, Knoxville, TN, May, 1989.
- 88. Z. Huang, M. JAMSHIDI, and H. Xiong, "On linear aggregation in input-output analysis," *Proc. National Systems Conference*, Beijing, China,1987 (in Chinese).
- M. Jacobus \*, M. JAMSHIDI, P. Dorato, C. Abdallah, and D. S. Bernstein, "Suboptimal strong stabilization using fixed-order dynamic compensation," *Proc. American Control* <u>Conference</u>, San Diego, CA, May 1990.
- 90. C. Abdallah, P. Dorato, and M. JAMSHIDI, "Survey of robust control of robots," <u>*Proc.*</u> <u>*American Control Conf.*</u>, San Diego, CA, May 1990.

- 91. Z. Geng,\* R. L. Carroll, and M. JAMSHIDI, "On the learning control of nuclear reactors by a 2-D system theory," *Proc. American Control Conference*, San Diego, May 1990.
- 92. T. Tipton, J. A. Meinhardt,\* and M. JAMSHIDI, "Control system description and performance of a phased array telescope," <u>Proc. SPIE Conf. Active Telescope Control</u>, Tucson, AZ, Feb., 1990.
- 93. T. Sarkodie-Gyan and M. JAMSHIDI, "Development of a prototype intelligent robot task planning algorithm using sensor fusion," <u>*Robotics and Manufacturing*</u>, M. Jamshidi and M. Saif, (eds.) vol. 3, ASME press, 1990.
- 94. J. N. Liou\* and M. JAMSHIDI, "On the adaptive control of a contour-following system," <u>Robotics and Manufacturing</u>, M. Jamshidi and M. Saif, (eds.) vol. 3, ASME Press, 1990.
- 95. M. JAMSHIDI and J. H. Mullins, "The New Mexico program for manufacturing engineering education," <u>Proc. UPCADEM Symposium</u>, Georgia Inst. Technology, Atlanta, GA, June 1988.
- 96. Z. Geng \*, R. Carroll, M. JAMSHIDI, and J. Xie,\* "Two dimensional model and algorithm for a class of iterative learning control system," *Proc. ACC*, 1990.
- 97. T. Sarkodie-Gyan and M. JAMSHIDI, "An intelligent robot task planning algorithm using sensory fusion", *Proc. German National Conf. On Instrumentation*, November, 1991.
- 98. M. JAMSHIDI, W. Horne \*, and N. Vadiee \*, " A neural network-based controller for two link robots," *Proc. IEEE CDC*, Honolulu, HI, December, 1990.
- 99. M. Jacobus \*, M. JAMSHIDI, C. Abdallah P. Dorato, and D. S. Bernstein, "Design of strictly positive real, fixed-order dynamic compensators," <u>Proc. IEEE CDC</u>, Honolulu, HI, December, 1990.
- M. JAMSHIDI and Z. Geng \*, "A two-dimensional learning controller for robot manipulators," <u>Proc. 4th ANS Topical Meeting on Robotics and Remote Systems</u>, M. Jamshidi and P. Eicker (eds.), US Government Printing Office, Washington, DC., Feb., 1991.
- M. JAMSHIDI and Z. Geng \*, "An Expert Learning Approach for Robot Manipulator Control," <u>Proc. 4th ANS Topical Meeting on Robotics and Remote Systems</u>, M. Jamshidi and P. Eicker (eds.), US Government Printing Office, Washington, DC., Feb., 1991, pp. 41-60.
- 102. J. Benitez-Read \*\*, M. JAMSHIDI, and R. Kisner, "On the advanced control techniques for a nuclear power system," *Proc. ACC*, Boston, MA, June, 1991.
- Z. Geng \*, R. L. Carroll, M. JAMSHIDI , and R. A. Kisner, "A learning control scheme with gain estimator," <u>Proc. IEEE Symposium on Intelligent Control</u>, Arlington, VA, August, 1991.
- 104. W. Honey \* and M. JAMSHIDI "ROBO\_SIM A robotic simulation environment on a personal computer" <u>Proc. IFAC Conference on Robots</u>, Vienna, Austria, September, 1991.
- Z. Geng \*, R. L. Carroll, and M. JAMSHIDI "Learning control of 2 D systems," <u>Proc. IEEE CDC</u>, Brighton, England, December, 1991.
- 106. M. JAMSHIDI, S. Baugh\*\*, D. Barak\*, and N. Vadiee\*, "A Comparison of an Expert and an Adaptive Control Approach," <u>Proc. IEEE CDC</u>, Brighton, England, December, 1991.
- R. D. Colbaugh, K. Glass, and M. JAMSHIDI "Adaptive Compliant Control of Robots," <u>Proc. IEEE CDC</u>, Brighton, England, December, 1991.

- 108. M. JAMSHIDI, D. Barak \*, N. Vaidee\*, and S. Baugh\*\*, "A Simulation Environment for Adaptive Fuzzy Control Systems," <u>Proc. Society of Computer Simulation</u> <u>Conference</u>, New Port Beach, CA, January 20, 1992.
- M. JAMSHIDI, T. Ross, D. Barak\*, S. Baugh\*\*, and N. Vadiee\*, "Fuzzy Control Systems : Laboratory Experiments for an Engineering Curriculum," <u>Proc. Intelligent and</u> <u>Fuzzy Control Systems Conference</u>, Louisville, KY, March 16-18, 1992.
- 110. M. JAMSHIDI, D. Barak\*, S. Baugh\*\*, and D. O'Geary, "Operations and Control of a Reliable Non-Chlorofuorocarbon Based Air Conditioning System via Fuzzy Logic," *Proc. IFAC Workshop on Intelligent Manufacturing*, Dearborn, MI, USA, October, 1992.
- D. Barak\*, S. Baugh\*\*, and M. JAMSHIDI, , "A Fuzzy Control of Thermal Systems," Robotics and Manufacturing, M. Jamshidi, et al. (eds.), ASME Press, NY., Vol. 4, 1992, pp. 649-654.
- 112. R. Marchbank\* and M. JAMSHIDI, "Fuzzy Tracking Control of a Laser Beam System, Robotics and Manufacturing, M. Jamshidi, et al. (eds.), ASME Press, NY., Vol. 4, 1992, pp. 681-686.
- 113. K. Kumbla\*, J. Moya\*\*, R. Baird\*, S. Rajagopalan\*, and M. JAMSHIDI, "Fuzzy Control of Three Links of a Robotic Manipulator, " Robotics and Manufacturing, M. Jamshidi, et al. (eds.), ASME Press, NY., Vol. 4, 1992, pp. 687-694.
- 114. M. JAMSHIDI and R. Marchbank\*, " On the Fuzzy Control of Optical Systems," Proc. Int. Symposium on Fundamentals of Discrete-Time Systems, Chicago, IL, June, 1992.
- 115. M. Akbarzadeh-T., M.-R., M. JAMSHIDI, M., and N. Vadiee, "A Hierarchical Fuzzy Controller Using Line-Curvature Feature Extraction for a Single Flexible Arm," Proceedings of the Third IEEE Conference on Fuzzy Systems, Orlando, Florida, 1993.
- 116. M. JAMSHIDI, E. Krijstansson \*, "On Fuzzy Control of Electric Power generation," Proc. IFAC World Congress, Sydney, Australia, July, 1993.
- 117. M. JAMSHIDI, R. Kelsey \*, and K. Bisset \*, "Fuzzy Traffic Control," Proc. IFAC World Congress, Sydney, Australia, July, 1993.
- 118. E. Krijstansson \* and M. JAMSHIDI, " A Comparative Study of Fuzzy and Crisp Control of Power Systems, " *Proc. ICEE '93*, Tehran, Iran, May, 18-21, 1993.
- 119. M. JAMSHIDI, R. Kelsey \*, and K. Bisset \*, " Fuzzy Logic Based Traffic Control -Software and Hardware Experiments, " *Proc. ICEE '93*, Tehran, Iran, May 18-21, 1993.
- 120. E. Tunstel \*\* and M. JAMSHIDI, "Fuzzy Control of a Hovercraft, " *Proc. 3rd IFIS*, Houston, TX, December 1-3, 1993.
- D. Peterson \* and M. JAMSHIDI, "Fuzzy Pattern Recognition of Geometric Objects, "*Proc. 5th IFSA*, Seoul, Korea, July 4-9, 1993, pp. 135-138.
- 122. K. Kumbla \* and M. JAMSHIDI, "Fuzzy Control of A Robot manipulator, "Proc. 5th IFSA, Seoul, Korea, July 4-9, 1993, pp. 1410-1413.
- 123. M. JAMSHIDI, R. Kelsey \* and K. Bisset \*, " Fuzzy Traffic Control Software and Hardware Implementations, " Proc. 5th IFSA , Seoul, Korea, July 4-9, 1993, pp. 907-910.
- 124. M. Akbarzadeh-Totoonchi \*, H. Xue \*, and M. JAMSHIDI, "Model Reduction of a Flexible Arm Using Pade'-Routh Approximation, "Proc. ICEE '93, Tehran, Iran, May 18-20, 1993.
- 125. K. K. Kumbla and M. JAMSHIDI, "Implementation of Fuzzy Logic and Neural Networks Control Algorithm Using a TMS320 DSP Chip," *First Industry/Academy*

*Symposium on Research for Future Supersonic and Hypersonic Vehicles*, A. Homaifar and J. C. Kelly (eds.), Albuquerque, NM: TSI Press, 1994, pp. 124-129.

- 126. E. Tunstel and M. JAMSHIDI, "Fuzzy Relational Representation of Uncertain Spatial Maps for Autonomous Vehicles," <u>First Industry/Academy Symposium on Research</u> <u>for Future Supersonic and Hypersonic Vehicles</u>, A. Homaifar and J. C. Kelly (eds.), Albuquerque, NM: TSI Press, 1994, pp. 1262-167.
- 127. E. Tunstel<sup>\*\*</sup> and M. JAMSHIDI, "Embedded Fuzzy Logic Based Wall Following Behavior for Mobile Robot Navigation", NAFIPS/IFIS/NASA '94, San Antonio, TX, De. 18-20, 1994, pp. 329-330.
- 128. A. Asgharzadeh \* and M. JAMSHIDI, "Fuzzy Control of a Video Printer " Proc. SPIE Boston, MA, September, 1993.
- 129. M. -R. Akbarzadeh-T\*, M. JAMSHIDI and R. D. Colbaugh, "Intelligent Control of Flexible and Redundant Manipulators," Waste-Management: From Risk to Remediation, ECM Press Publishers, Albuquerque, New Mexico, 1994.
- 130. K. Kumbla and M. JAMSHIDI, "Control of Robotic Manipulator Using Fuzzy Logic", *Proc. Third IEEE Conference on Fuzzy Systems*, Orlando, Florida., 1994.
- 131. M. Akbarzadeh \*, K. Kumbla \*, and M. JAMSHIDI, "Intelligent Control of Flexible and Redundant Robot", Waste-management Education and Research Consortium (WERC) Conference, Las Cruses, April 1994.
- 132. M. JAMSHIDI, C. C. Nguyen, R. Lumia, and J. Yuh (eds.) *Intelligent Automation and Soft Computing*, Preface, Vol. 1, Albuquerque, NM: TSI Press, 1994, pp. vii.
- 133. M. JAMSHIDI, C. C. Nguyen, R. Lumia, and J. Yuh (eds.) *Intelligent Automation and Soft Computing*, Vol. 2, Albuquerque, NM, 1994, pp. vii.
- 134. K. Kumbla \* and M. JAMSHIDI, "Implementation of Fuzzy Logic and Neural Networks Control Algorithm Using a TMS320 DSP Chip", First University/Industry Symposium on High Speed Civil Transport Vehicles, December, 1994., pp. 124-129.
- 135. K. Kumbla \* and M. JAMSHIDI, "Implementation of Fuzzy Logic and Neural Networks Control Algorithm Using DSP Chip" Symposium on Applied Computing, Nashville, February 1995.
- K. Kumbla \*, M. Akbarzadeh \* and M. JAMSHIDI, "TMS320 DSP Chip Based Neuro-Fuzzy controller" IEEE Conference on Man, System and Cybernetics, Vancouver, pp 4015-4020, October 1995.
- 137. M. Akbarzadeh \*, K. Kumbla\* and M. JAMSHIDI, "Genetic Algorithms in Learning Fuzzy Hierarchical Control of Distributed Parameter 4032, October 1995.
- 138. K. Kumbla \*, M. JAMSHIDI and S. Rodriguez \*, "Adaptive Neuro-Fuzzy Controller, *First National Student Conference*, NASA , March 1996.
- 139. K. Kumbla\* and M. JAMSHIDI "Intelligent Control of Fault-Tolerant Robots," *Proc. IIZUKA '94*, Iizuka, Japan, August, 1994.
- 140. M. Akbarzadeh\* and M. JAMSHIDI "Fuzzy Control of Flexible Robots," <u>Proc.</u> <u>IIZUKA '94</u>, Iizuka, Japan, August, 1994.
- 141. E. Tunstel\*\* and M. JAMSHIDI "Fuzzy-Neural Control of Mobile Robots," *Proc. IIZUKA '94*, Iizuka, Japan, August, 1994.
- 142. E. Tunstel\*\* and M. JAMSHIDI "On Embedded Fuzzy Controllers," *Proc. ISRAM* <u>'94</u>, Maui, Hawaii, August, 1994, pp. 619-624.
- A. Martinez\*\*, E. Tunstel\*\* and M. JAMSHIDI "Collision Avoidance of Mobile Robots Using Fuzzy Logic," *Proc. ISRAM '94*, Maui, Hawaii, August, 1994.

- 144. N. Vadiee\* and M. JAMSHIDI, "Advanced Fuzzy Ruled Based Expert Systems, " <u>Proc. ICEE '93</u>, Tehran, Iran, May 18-22, 1993.
- 145. A. Martinez\*\* and M. JAMSHIDI "A Fuzzy Controller for Engine Idle Speed," *Proc. 36th IEEE Midwest Symposium*, Detroit, Michigan, August, 1993.
- 146. H. Hwang, M. Saif, and M. JAMSHIDI "Fault Detection and Diagnosis of a Nuclear Power Plant Using Artificial Neural Networks" <u>Proc. World IFAC Congress</u>, Sydney, Australia, July, 1993.
- E. Tunstel\*\* and M. JAMSHIDI, "Fuzzy Logic Based Collision Avoidance for a Mobile Robot," <u>Proc. IFIS '93 Conference</u>, Houston, TX, December, 1993.
- 148. E. Tunstel\*\*, S. Hockemeier\*, and M. JAMSHIDI., "Fuzzy Control for Stabilization of a Hovercraft Platform", <u>Proceedings, Engineering & Architecture</u> <u>Symposium, Workshop, and Exhibition</u>, Prairie View A&M University, Prairie View, Texas, March 21-22, 1994, pp. 294-299.
- 149. E. Tunstel\*\*, A. Martinez\*\*, and M. JAMSHIDI, "Mobile Robot Collision Avoidance Using a Fuzzy Logic Controller", <u>Engineering & Architecture Symposium</u>, <u>Workshop, and Exhibition</u>, Prairie View A&M University, Prairie View, TX, march 21-22, 1994, pp. 304-309.
- 150. E. Tunstel\*\*, and M. JAMSHIDI, "Fuzzy Logic and Behavior Control Strategy for Autonomous Mobile Robot Mapping", *Proceedings, 3rd IEEE International Conference on Fuzzy Systems*, Orlando, FL, June 26-July 2, 1994, pp. 514-517.
- 151. M. JAMSHIDI, F. Pin, and F. Pierrot, *Robotics and Manufacturing: Robotics* <u>Research and Applications</u>, Vol. 3, Albuquerque, NM: TSI Press, 1996, pp. viii-ix.
- 152. M. JAMSHIDI, J. Yuh, and F. Pierrot (eds.) *Intelligent Automation and Control*, Vol. 4, Albuquerque, NM: TSI Press, 1996, pp. xii-xiii.
- M. JAMSHIDI, M. Fathi, and P. Dauchez (eds.) <u>Soft Computing for Industry</u>, Vol. 5, Albuquerque, NM: TSI Press, 1996, pp. ix-xi.
- 154. E. Tunstel\*\*, A. Asgharzadeh\*, and M. JAMSHIDI, "Towards Embedded Fuzzy Control of Mobile Robots", *Proceedings, 3rd International Conference on Fuzzy Logic, Neural Nets and Soft Computing, Iizuka '94*, Iizuka, Fukuoka, Japan, August 1-7, 1994.
- 155. A. Asgharzadeh\*, E. Tunstel\*\*, and M. JAMSHIDI, "An Embedded Fuzzy Controller for a Video Printer", <u>Proceedings 3rd International Conference on Fuzzy Logic,</u> <u>Neural Nets and Soft Computing, Iizuka '94</u>, Iizuka, Fukuoka, Japan, August 1-7, 1994.
- A. Martinez\*\*, E. Tunstel\*\*, and M. JAMSHIDI, "Collision Avoidance of Mobile Robots Using Fuzzy Logic", *Proceedings, 5th Int'l Symposium on Robotics and Manufacturing ISRAM '94*, Maui, Hawaii, August 14-17, 1994, pp. 193-198.
- 157. E. Tunstel\*\*, M. JAMSHIDI, "On Embedded Fuzzy Controllers", *Proceedings, 1st World Automation Congress (WAC '94)*, Maui, Hawaii, August 14-17, 1994, pp. 619-624.
- 158. E. Tunstel\*\* and M. JAMSHIDI, "Fuzzy Relational Representation of Uncertain Spatial Maps for Autonomous Vehicles", <u>Proceedings, 1st Industry/Univ. Symp. on High</u> <u>Speed Civil Transport Vehicles (HSCTV)</u>, NC A&T State Univ., Greensboro, NC, Dec . 4-6, 1994, pp. 162-167.
- 159. E. Tunstel\*\* and M. JAMSHIDI, "Embedded Fuzzy Logic-Based Wall Following Behavior for Mobile Robot Navigation", <u>Proceedings NAFIPS/IFIS/NASA '94</u>, San Antonio, TX, De. 18-20, 1994.

- 160. E. Tunstel\*\*, M. R. Akbarzadeh-T.\*, K. Kumbla\* and M. JAMSHIDI, "Hybrid Fuzzy Control Schemes for Robotic Systems", <u>Proceedings, 10<sup>th</sup> IEEE Int'l. Symp. on</u> <u>Intelligent Control</u>, Monterey, CA, August 27-29, 1995, pp. 171-176.
- 161. M. R. Akbarzadeh-T.\*, K. Kumbla\* and M. JAMSHIDI, "Genetic Algorithms in Learning Fuzzy Hierarchical Control of Distributed Parameter Systems," <u>Proceedings,</u> <u>IEEE Conference of Systems, Man and Cybernetics</u>, Vancouver, Canada, 1995.
- 162. K. Kumbla\*, M. R. Akbarzadeh-T.\*, and M. JAMSHIDI, "TMS320 DSP Based Neuro-Fuzzy Controller," <u>Proceedings, IEEE Conference on Systems, Man and</u> <u>Cybernetics</u>, Vancouver, Canada, 1995.
- 163. M. JAMSHIDI and A. Titli, "Stability of Fuzzy Control Systems via Interval Matrix Method", *Proc. IEEE Mediterranean Conference*, Cyprus, July, 1995.
- 164. M. R. Akbarzadeh-T.\*, E. Medina\*\*, and M. JAMSHIDI, "DSP Implementation of Evolutionary Fuzzy Control," <u>Proceedings of the First National Student Conference,</u> <u>National Alliance of NASA Univ. Research Centers</u>, NC A&T, Greensboro, NC, March 1996.
- 165. E. Tunstel\*\*, T. Lippincott\*\* and M. JAMSHIDI, "Introduction to Fuzzy Logic Control with Application to Mobile Robotics", *Ist National Student Conference, National* <u>Alliance of NASA Univ. Research Centers</u>, NC A&T, Greensboro, NC, March 1996, pp. 174-177.
- M. JAMSHIDI and C. W. de Silva (eds.) *Intelligent Automation and Control*, Vol. 6, Preface, Albuquerque, NM: TSI Press, 1998, pp. vii-viii.
- M. JAMSHIDI, F. Pierrot and M. Kamel (eds.) <u>*Robotics and Manufacturing*</u>, Vol. 7, Preface, Albuquerque, NM: TSI Press, 1998, pp. viii-x.
- 168. M. JAMSHIDI, Z. Bien and M. Fathi (eds.) <u>Soft Computing, Multimedia and Image</u> <u>Processing: Research and Applications</u>, Preface, Vol. 8, Albuquerque, NM: TSI Press, 1998, pp. viii-x.
- 169. E. Tunstel\*\*, D. E. Gonzales\*\*, and M. JAMSHIDI, "Embedded Mobile Robot Control Using Fuzzy Logic Integrated Circuits", <u>Proceedings, 1<sup>st</sup> National Student</u> <u>Conference, National Alliance of NASA Univ. Research Centers</u>, NC A&T, Greensboro, NC, March 1996, pp. 178-181.
- 170. E. Tunstel\*\*, M. R. Akbarzadeh-T\*, K. Kumbla\*, and M. JAMSHIDI, "Soft Computing Paradigms for Learning Fuzzy Controllers with Applications to Robotics," <u>Proceedings of the Biennial Conference of the North American Fuzzy Information</u> <u>Processing Society</u>, 1996, pp. 355-359.
- 171. E. Tunstel\*\*, and M. JAMSHIDI, "Hierarchical Fuzzy Control Approach to Adaptive Behavior Synthesis in Mobile Robots," <u>Proceedings, From Animals to Animals:</u> <u>4th Int'l Conference on Simulation of Adaptive Behavior</u>, Cape Cod, MA, September 1996.
- 172. A. S. Heger, M. JAMSHIDI, and N. K. Alang-Rashid\*, Self-Tuning Fuzzy Logic Nuclear Reactor Controller. FLINS-96, <u>Second International Workshop on Intelligent</u> <u>Systems and Soft Computing for Nuclear Science and Industry</u>, Mol, Belgium, (September 25-27, 1996)
- 173. M. R. Akbarzadeh-T.\*, M. JAMSHIDI, and P. Dorato, "Fuzzy Hierarchical Control of Distributed Parameter Systems, A Case Study on a Heating Slab," *Proceedings of the Applied Computing Symposium on Applied Computing*, Nashville, Tennessee, 1995.

- 174. M. JAMSHID, M-R. Akbarzadeh\* and K. Kumbla\*, Design and Implementation of Fuzzy Controllers for Complex Systems - Case Study : A Water Desalination Plant, *Proceedings IFIS 96*, Cancun, Mexico, November 12-15, 1996.
- 175. M. R. Akbarzadeh-T.\* and M. JAMSHIDI, "Evolutionary Fuzzy Control of a Flixible Link," nominated for Best Paper Award, <u>Proc. IEEE International Conference on</u> <u>Robotics and Automation</u>, Albuquerque, New Mexico, April 1997.
- 176. M. R. Akbarzadeh-T.\*, E. Tunstel\*\*, and M. JAMSHIDI, "Genetic Algorithms and Genetic Programming: Combining Strength in One Evolutionary Strategy, " <u>Proc. Joint</u> <u>Conference on Environment</u>, Albuquerque, New Mexico, April, 1997.
- 177. E. T. Tunstel\*\*, H. Danny\*\*, T. Lippincott\*\*, and M. JAMSHIDI,. "Adaptive Fuzzy-Behavior Hierarchy for Autonomous Navigation", <u>Proceedings of IEEE Int. Conf.</u> <u>On Robotics and Automation</u>, Albuquerque, NM, April 20-25, 1997.
- 178. M. R. Akbarzadeh-T.\* and M. JAMSHIDI, "Incorporating A-Priori Expert Knowledge in Genetic Algorithms," nominated for Best Paper Award, <u>Proc. IEEE</u> <u>Conference on Computational Intelligence in Robotics and Automation</u>, Monterey, California, July 1997.
- 179. M. R. Akbarzadeh-T.\*, K. Kumbla, M. JAMSHIDI, and D. M. K. Al-Gobaisi, "GAoptimization of PID Fuzzy Control of Desalination Plants" <u>Proc. IDA World Congress on</u> <u>Desalination and Water Reuse</u>, Madrid Spain, October 6-9, 1997.
- P. S. Sarkar\*, M. R. Akbarzadeh-T.\*, M. JAMSHIDI, and D. M. K. Al-Gobaisi,
   "Design and Modeling of a Laboratory Scale Single Stage Flash Desalination Plant," <u>Proc.</u> <u>IDA World Congress on Desalination and Water Reuse</u>, Madrid Spain, October 6-9, 1997.
- 181. K. Kumbla\* and M. JAMSHIDI,. "Neural Network Based Identification of Robot Dynamics Used for Neuro-Fuzzy Controller", <u>Proceedings of IEEE Int. Conf. On Robotics</u> <u>and Automation</u>, Albuquerque, NM, April 20-25, 1997.
- 182. A. Jadbabaie\*, A. Titli, and M. JAMSHIDI, "Separation Property of Observer/Controller for Continuous-Time Fuzzy Systems" <u>Proc. 35th Allerton National</u> <u>Conference on Communication & Control</u>, September, 1997, Allerton, IL.
- 183. K. Kumbla\* and M. JAMSHIDI, "Real-Time Neuro-Fuzzy Control of a Direct Drive Motor," <u>Proc. IEEE Conference on System, Man and Cybernetics</u>, October 1997, Orlando, Florida.
- 184. E. Tunstel\*\*, H. Danny\*\*, T. Lippincott\*\* and M. JAMSHIDI, "Fuzzy Behavior-Based Navigation for Planetary Microrovers", <u>Proc. of NASA University Research Centers</u> <u>Technical Conference</u>, Albuquerque, NM, 1997, pp. 735-740.
- 185. E. Tunstel\*\* and M. JAMSHIDI, " On Decision-Making Among Multiple Rule-Bases in Fuzzy Control Systems, "*Proc. of NASA University Research Centers Technical* <u>Conference</u>, Albuquerque, NM, 1997, pp. 729-734.
- 186. M. R. Akbarzadeh\*, E. Tunstel\*\* and M. JAMSHIDI, "Genetic Algorithms and Genetic Programming: Combining Strengths in One Evolutionary Strategy," <u>Proc. of 1997</u> <u>Waste Education and Research a Consortium/Hazardous Substance Research Center</u> (<u>WERC/HSRC</u>) Joint Conference on Environment, Albuquerque, NM, 1997, pp. 729-734. (Best Student Paper Award).
- 187. E. Tunstel\*\*, H. Danny\*\*, T. Lippincott\*\* and M. JAMSHIDI, "Adaptive Fuzzy-Behavior Hierarchy for Autonomous Navigation, "*Proc. IEEE Int. Symposium on* <u>Computational Intelligence in Robotics and Automation</u>, Albuquerque, NM, 1997, pp. 829-834.

- 188. E. Tunstel\*\*, H. Danny\*\*, T. Lippincott\*\* and M. JAMSHIDI, "Autonomous Navigaion Using an Adaptive Hierarchy of Multiple Fuzzy-Behaviors", <u>Proc. IEEE Int.</u> <u>Symposium on Computational Intelligence in Robotics and Automation</u>, Monterey, CA, July, 1997, pp. 276-281.
- A. Jadbabaie\*, A. Titli, and M. JAMSHIDI, "Fuzzy Observer-Based Control on Nonlinear Systems" <u>Proc. IEEE Conference on Decision and Control (CDC)</u>, December, 1997, San Diego, CA.
- 190. A. Jadbabaie\*, A. Titli and M. JAMSHIDI, "Guaranteed-Cost Design of Continuous-Time Takagi-Sugeno Fuzzy Systems via Linear Matrix Inequalities" <u>Proc.</u> <u>IEEE International Conference on Fuzzy Systems (Fuzz IEEE 98)</u>, Anchorage, AK.
- 191. M. R. Akbarzadeh-T.\*, S. Quintano\*\* and M. JAMSHIDI, "Fuzzy Control of a Flexible Link: A Review" <u>Proc. NASA University Research Centers-Technical Conference</u>, Huntsville, AL, February, 1998, pp. 252-256.
- 192. M. R. Akbarzadeh-T.\*, S. Shaikh\*, R. Hubbell\*, and M. JAMSHIDI, "SoftLab®: A Soft Computing Software for Experimental Research with Commercialization Aspects", <u>Proc. NASA University Research Centers-Technical Conference</u>, Huntsville, AL, February, 1998, pp. 182-187.
- 193. M.-R. Akbarzadeh-T.\*, M. Johnson\*\* and M. JAMSHIDI, "Control of Flexible-Link Manipulators in Hazardous Environment", <u>Proc. 1998 Conference on Waste</u> <u>Management</u>, Tucson, Arizona, March, 1998.
- 194. M.-R. Akbarzadeh-T.\*, K. K. Kumbla\*, S. Shaikh\*, and M. JAMSHIDI, "SoftLab: A Soft Computing Software Laboratory for Research and Development", <u>Proc. 1998</u> <u>Conference on Waste Management</u>, Tucson, Arizona, March, 1998.
- 195. M.-R. Akbarzadeh-T.\*, S. Shaikh\*, and M. JAMSHIDI, "Hierarchical Fuzzy Control of Flexible Robotic Systems", *Proc. IFAC Symposium on Large Scale Systems*, Patras, Greece, July 1998.
- 196. A. Jadbabaie\*, M.J. Jadbabaie, and M. JAMSHIDI, "Guaranteed-Cost Design of Takagi-Sugeno Fuzzy Controllers: Discrete-Time Case" <u>Proc. 3<sup>rd</sup> World Automation</u> <u>Congress</u>, May, 1998, Anchorage Alaska.
- 197. S. Sarkar\*, M-R. Akbarzadeh-T.\*, M. JAMSHIDI, "Modeling for Simulation and Control of a Single Stage Flash Desalination Pilot-Plant", <u>Proc. 1998 World Automation</u> <u>Congress</u> (May 1998), Anchorage, Alaska.
- 198. P. Sarkar\*, M-R. Akbarzadeh-T.\* and M. JAMSHIDI, "Decentralized Hierarchical Fuzzy Control Architecture for a Single Stage Flash Desalination Process Plant", *Proc. 3<sup>rd</sup> World Automation Congress*, Anchorage, Alaska, May, 1998.
- 199. M. -R. Akbarzadeh-T.\*, E. Tunstel\*\*, K. Kumbla\* and M. JAMSHIDI, "Soft Computing Paradigms for Hybrid Fuzzy Controllers: Experiments and Applications", <u>Proc.</u> <u>IEEE International Conference on Fuzzy Systems</u>, Anchorage, Alaska, May 1998.
- M. JAMSHIDI, P. Borne and J. S. Jamshidi (eds.) <u>Intelligent Automation and</u> <u>Control</u> (Proc. ISIAC 2000), Vol. 9, Preface, Albuquerque, NM: TSI Press, 2000, pp. viiix..
- 201. M. JAMSHIDI, A. A. Maciejewski, S. Nahavandi and R. Lumia (eds.) <u>Robotic and</u> <u>Manufacturing Systems: Recent Results in Research, Development and Applications</u>, (Proc. ISORA and ISOMA 2000), Vol. 10, Preface, Albuquerque, NM: TSI Press, 2000, pp. viiix.

- 202. M. JAMSHIDI, M. Fathi and T. Furuhashi (eds.) <u>Soft Computing, Multimedia and Image Processing: Trends, Principles and Application</u>s (Proc. IFMIP 2000 and ISSCI 2000), Vol. 11, Preface, Albuquerque, NM: TSI Press, 2000, pp. vii-ix.
- 203. C. Guo, P. Sarkar\* and M. JAMSHIDI, "Soft Computing Based Intelligent Controller and its Application to a Nonlinear System", Proc. World Automation Congress, Maui, HI, USA, June, 2000, pp. 340-345.
- M. JAMSHIDI, "Autonomous Control of Complex Systems : Applications in Robotics," <u>Proc. Richard Bellman Memorial Conference</u>, Santa Fe, NM, May, 1999.
- S. Berman\*, M. de Oleivera\* and M. JAMSHIDI, "Fuzzy-Behavior Control of Mobile Robots," *Proc. IEEE Mediterranean Conference*, Haifa, Israel, June, 1999.
- 206. J. Parkinson\*, M. JAMSHIDI, and P. Wantuck, "Fuzzy Control of a Nonlinear Three-Tank System." *Proc. 4th WAC*, Maui, HI, USA, June, 2000., pp.452-460.
- 207. M. Johnson\*\*, M. JAMSHIDI K. Firoosbaknsh and M. Moneim, "Flexor-Tendon-Repair Technique Determination : Decision via soft computing versus Taguchi method," <u>Proc. 4<sup>th</sup> WAC</u>, Maui, HI, USA, June 2000, pp. 124-130.
- 208. A. El-Osery\*, R. Lecointe\*, M. JAMSHIDI, M. H. Nehrir, and J. Lu, "A Takagi-Sugeno Type Fuzzy modeling, control and stability analysis of power systems," <u>Proc. 4<sup>th</sup></u> <u>WAC</u>, Maui, HI, USA, June 2000, pp. 534-539.
- 209. P. Sarkar\*, M. Akbarzadeh-T\* and M. JAMSHIDI, "Decentralized hierarchical fuzzy control architecture for a single stage flash desalination process plant," <u>Proc. 4<sup>th</sup></u> <u>WAC</u>, Maui, HI, USA, June 2000.
- 210. S. A. Taheri\*, M JAMSHIDI, H. Sarjoughian, and B. P. Zeigler, " DEVS Simulation and Modeling of Multi-robot System", *Proceedings of AI, Simulation and Modeling Conference*, Tucson Arizona, 6-8 March, 2000.
- S. A. Taheri\* and M. JAMSHIDI," ANN-Based Sliding Mode Control for Nonholonomic Mobile Robots", *Proceedings of IEEE Conference on Control Applications*, Anchorage, Alaska, 25-27 Sep. 2000.
- M. JAMSHIDI, "Autonomous Control of Space-Bound Systems", <u>Proc. 7th</u> <u>Conference on Computers, Control and Systems</u>," Cairo, Egypt, Elsevier Publishers, February, 2000, pp. 1-6. . (Keynote Address)
- M. JAMSHIDI, "Autonomous Control of Complex Systems", <u>Proc. Iizuka 2000</u>, Iizuka, Japan, September, 2000
- M. A. A. de Oliveira\*, S. Berman\*, E. Tunstel\*\* and M. JAMSHIDI, "Remote Surface Exploration With Soft-Computing Based Cooperative Rovers," <u>Proc.4<sup>th</sup> World</u> <u>Automation Congress</u>, June, 2000, Vol. 10, Maui, HI, USA, pp. 163-168.
- 215. M. Johnson\*\*, M. JAMSHIDI, K. Firoozbakhsh and M. Moneim, "Flexor-Tendon-Repair Technique Determination: Decision via Soft Computing Versus Taguchi Methods," <u>Proc. 4<sup>th</sup> World Automation Congress, (IFMIP 2000)</u>, June, 2000, Vol. 11, Maui, HI, USA, pp. 124-130.
- S. Berman\*, Y. Edan and M. JAMSHIDI," Multi-Agent Strategy for Automated Guided Vehicle Systems in Material Handling," <u>Proc. 4<sup>th</sup> WAC Congress (ISSCI 2000)</u>, June, 2000, Vol. 11, Maui, HI, USA, pp. 322-327.
- C. Guo, P. Sarkar\* and M. JAMSHIDI, "Soft Computing-Based Intelligent Controller And Its Application To A Nonlinear System," <u>Proc. 4<sup>th</sup> World Automation</u> <u>Congress, (ISSCI 2000)</u>, June, 2000, Vol. 11 Maui, HI, USA, pp. 340-345.

- W. J. Parkinson\*, P. J. Wantuck, M. JAMSHIDI, K. S. Patrick\*, and S. S. Jaffer, "Fuzzy Control of a Nonlinear Three-Tank- System," <u>Proc. 4<sup>th</sup> World Automation</u> <u>Congress, (ISSCI 2000)</u>, June, 2000, Vol. 11 Maui, HI, USA, pp. 452-460.
- A. E1-Osery, R. Lecointe\*, M. JAMSHIDI, H. Nehrir and Jie Lu, "A Takagi-Sugeno Type Fuzzy Model for Power System Stability Analysis," *Proc. World Automation Congress, (ISSCI 2000),* June, 2000, Vol. 11 Maui, HI, USA, pp. 534-539.
- W. J. Parkinson\*, S. P. Abein, K. L. Creek, P. J. Wantuck, T. Ross and M. JAMSHIDI," Application of Fuzzy Set Theory for Exposure Control in Beryllium Part Manufacturing," <u>Proc. 4<sup>th</sup> World Automation Congress, (ISSCI 2000)</u>, June, 2000, Vol. 11 Maui, HI, USA, pp. 588-597.
- M. JAMSHIDI, "V-IP An Innovative Approach to Engineering Education," <u>Proc.</u> <u>Northeastern University Conference on Practice-Oriented Education</u>, Boston, MA, April, 2001.
- 222. M. JAMSHIDI, "V-IP An Innovative Approach to Minority Students Engineering Education," *Proc. ASEE Conference*, Albuquerque, NM, June, 2001.
- M. JAMSHIDI," AUTONOMOUS CONTROL SYSTEMS Applications to Space Systems," <u>Proc. Int. Conf. on Soft Computing and Computing with Words, (ICSCCW</u> <u>2001)</u>, June 2001, Antalya, Turkey, pp. 1-12. (Keynote Address)
- 224. M. JAMSHIDI, "Autonomous Control Systems Applications to Optical Systems and Image Processing," <u>Proc. SPIE Annual Conference</u>, San Diego, CA, USA, August 2001. (Keynote Address)
- 225. M. JAMSHIDI, "Autonomous Control of Complex Systems -Space and Earth-Bound Applications," <u>Proc. Int. Conference on Systems Science</u>, Worclaw, Poland, September 2001. (Keynote Address)
- 226. M. JAMSHIDI, "Autonomous Control of Cooperative Robotic and Satellite Systems," -Space and Earth-Bound Applications," <u>*Proc. Int. on Cooperative Robotics*</u>, Padeborne, Germany, September, 2001. (Keynote Address)
- 227. J. Burge, A. El-Osery, M. JAMSHIDI and M. Fathi "V-LAB : A Virtual Laboratory for Distributed Robotic Modeling and Simulation," *Proc. IEEE Int. Conference on Systems, Man and Cybernetics*, Tucson, AZ, October, 2001.
- 228. A. El-Osery, J. Burge, M. JAMSHIDI and M. Fathi "Stochastic Learning Automaton for Learning Control of Robotic Agents, "*Proc. IEEE Int. Conference on Systems, Man and Cybernetics*, Tucson, AZ, October, 2001.
- S. Berman\*, Y. Edan and M. JAMSHIDI," Decentralized Autonomous AGVS for Material Handling," <u>Proc. Int. Conference on Production Research</u>, Prague, Czech Republic, August 2001.
- M. JAMSHIDI, "Autonomous Control Systems With Applications to Optical Systems," (Invited Keynote speech), *Proc. SPIE Conference*, Sand Diego, CA, July, 2001.
- A. El-Osery, C. Abdallah and M. JAMSHIDI, "Time Delay and Power Control in Spread Spectrum Wireless Networks," *Proc. IFAC Conference on Time-Delay Systems*, Dec. 9-11, 2001, Santa Fe, NM, USA.
- 232. M. JAMSHIDI, "A Vertically Integrated Approach to Graduate Engineering Education," *Proc. World Automation Congress*, Orlando, FL, June, 2002.
- 233. W. J. Parkinson\*, R.E. Smith, F. N. Mortensen, P. J. Wantuck, M. JAMSHIDI and J. J. Ross, "Fuzzy SPC Filter for a Feed-Forward Control System for a Three-Phase Oil Field Centrifuge" <u>Proc. World Automation Congress</u>, Orlando, FL, June, 2002.

- 234. S. A. Taheri\* F. Macedo and M. JAMSHIDI," ANN-Based Sliding Mode Control for Robots", *Proceedings of Space and Robotics 2000*, Albuquerque, NM, March. 2000.
- 235. S. Akhavan Taheri<sup>\*</sup>, H. Sarjoughian, M. Jamshidi and B. Zeigler, "Imitating the Human Immune System Capabilities for Multi-agent Federation Formation," *Proc. IEEE Biomedical Conf.*, Mexico City, Mexico, 2001.
- 236. A. El-Osery\* and M. JAMSHIDI "A Stochastic Learning Automaton Learning Autonomous Control of Robotic Agents, "*Proc. IEEE Int. Conference on Systems, Man and Cybernetics*, Tunisia, October, 2002.
- P. Sridhar\* and M. JAMSHIDI "V-Lab® a virtual laboratory for distributed simulation, "*Proc. IEEE Int. Conference on Systems, Man and Cybernetics*, Washington, DC, October, 2003.
- S. Beaty\*, U. Dole\* and M. JAMSHIDI "Hardware design of an all-train rover, "Proc. IEEE Int. Conference on Systems, Man and Cybernetics, Washington, DC, October, 2003.
- 239. Y. Wang\* and M. Jamshidi, "Multispectral Landsat Image Classification Using Fuzzy Expert Systems," <u>Proc. World Automation Congress</u> – Multimedia track, June 28-July 1, 2004, Seville, Spain.
- 240. J. Liu\*, M. Jamshidi and S. Pourbabak, "A Novel Auto Regression and Fuzzy-Neural Hybrid Method to Identify Cardiovascular Dynamics," <u>*Proc. World Automation*</u> <u>*Congress*</u> – Multimedia Track, June 28-July 1, 2004, Seville, Spain.
- 241. S. Beatty\* and M. Jamshidi, "Simulation of a Spacecraft Electrical Power Distribution System Using the Simulink Power System Blockset and Soft Computing Techniques," <u>Proc. World Automation Congress</u> – Automation and Control Track, June 28-July 1, 2004, Seville, Spain.
- 242. P. Sridha\* and M. Jamshidi , "A Framework for Multi-agent Discrete Event Simulation: V-Lab®," <u>Proc. World Automation Congress</u> – Automation and Control Track, June 28-July 1, 2004, Seville, Spain.
- 243. S. Sheikh-Bahaei\* and M. Jamshidi, "Discrete Event Fuzzy Logic Control with Application to Sensor-Based Intelligent," *Proc. World Automation Congress* Robotics Track, June 28-July 1, 2004, Seville, Spain.
- 244. T. Song\*, X. -M. Huang, R. R. Lee, C. Gasparovi, and M. Jamshidi, "A Hierarchical Tissue Segmentation Approach in Brain MRI Images," *Proc. World Automation Congress* – Biomedicine Track, June 28-July 1, 2004, Seville, Spain.
- 245. H. Berenji, D. Herrick and M. Jamshidi," Data Mining Based Algorithms for Prognostic Studies of the ABL System," Paper presented at the <u>6<sup>th</sup> Annual Directed Energy</u> <u>Symposium</u>, October 22-24, 2003, Albuquerque, NM
- 246. M. Jamshidi, D. Herrick, D. Washburn and H. Berenji, "Design, Control and Prognostic of a Laser Pointing System," *Proc. Laser Systems Technology Conference*, 12-16 April 2004, Orlando, Florida
- Y. Wang, F. Benito, G. A. Vera, and M. JAMSHIDI<sup>,</sup> "Control Design for Diagnostic and Prognostic of Hardware Systems," *Proc. FUZZ-IEEE Conference*, Budapest, Hungary, July 25-28, 2004.
- 248. V. Stone, K. Meadows, and M. JAMSHIDI, "An Investigation of Health Monitoring, Prognostic, and Diagnostic Techniques Using Pattern Recognition and Data Mining," to be presented at <u>AMOS Conference</u>, September 13-17, 2004, Maui, HI.

- 249. H. Berenji, Y. Wang, D. Vebgerov, R. Langari and M. JAMSHIDI, "Using Gated Experts in Fault Diagnosis and Prognosis," <u>Proc. FUZZ-IEEE Conference</u>, Budapest, Hungary, July 25-28, 2004
- 250. Y. Wang and M. JAMSHIDI, "Fuzzy Logic Applied in Remote Sensing Image Classification", <u>Proc. IEEE Conference on Systems, Man and Cybernetics</u>, Hague, Netherlands, October 2004.
- 251. Y. Wang, M. JAMSHIDI, S. Morain, P. Neville and C. Bales, "Multispectral Landsat Images Classification Using a Data Clustering Algorithm", <u>Proc. International</u> <u>Society for Photogrammetry and Remote Sensing</u>, Istanbul, Turkey, July 2004.
- 252. Y. Wang\* and M. JAMSHIDI, "A fuzzy-neural approach to remote sensing data clustering," *Proc. Int. Conf. On Machine Learning and Cybernetics* August 26-29, 2004, Shanghai, China.
- 253. J. Liu\* and M. Jamshidi, "Cardiac system identification via fuzzy-neural systems," <u>Proc. Int. Conf. On Machine Learning and Cybernetics</u> – August 26-29, 2004, Shanghai, China.
- 254. P. Sridhar\* and M. JAMSHIDI "Distributed multi-agent modeling and simulation, "<u>Proc. IEEE Int. Conference on Systems, Man and Cybernetics</u>, The Hague, the Netherlands, October 2004.
- 255. Y. Wang\* and M. JAMSHIDI "Remote sensing using fuzzy neural clustering techniques, "*Proc. IEEE Int. Conference on Systems, Man and Cybernetics*, The Hague, the Netherlands, October 2004.
- 256. P. Sridhar, A. M. Madni, M. JAMSHIDI, "Intelligent Monitoring of Sensor Networks Using Fuzzy Logic Based Control," <u>Proc. 2006 IEEE SMC Conference</u>, Taipei, Taiwan, October 2006, pp. 3394-3399.
- 257. H. Azarnoosh, B. Horan, P. Sridhar, A. Madni and M. JAMSHIDI, "Towards optimization of a real-world Robotic-Sensor System of Systems," *Proc, 2006 World Automation Congress* (Robotics Track ISORA), Budapest, Hungary, July, 2006 (See Volume 19, TSI Press, ISBN 1-889335-33-9, San Antonio, TX, 2006), pp. 223-230.
- 258. P. Sridhar1, A. M. Madni, M. JAMSHIDI, "Hierarchical Data Aggregation in Spatially Correlated Distributed Sensor Networks," <u>Proc, 2006 World Automation</u> <u>Congress</u> (Robotics Track ISORA), Budapest, Hungary, July, 2006 (See Volume 19, TSI Press, ISBN 1-889335-33-9, San Antonio, TX, 2006), pp. 39-44.
- 259. P. Sridhar, A. M. Madni, A., M. JAMSHIDI, "Intelligent Monitoring of Sensor Networks using Fuzzy Logic Based Control", *Proc. IEEE Conf. on Systems, Man and* <u>Cybernetics</u>, Taipei, Taiwan, 2006, , 6pp.
- 260. M. JAMSHIDI, "A Vertically Integrated Approach to Graduate Control Engineering Education of Ethnic Minorities," <u>Proc, 2006 World Automation Congress</u> (Robotics Track ISORA), Budapest, Hungary, July, 2006 (See Volume 19, TSI Press, ISBN 1-889335-33-9, San Antonio, TX, 2006), pp. 395-402.
- 261. P. Sridhar, A. M. Madni, M. JAMSHIDI,"Intelligent Object-Tracking using Sensor Networks", *Proc. IEEE Sensor Applications Symposium (SAS)*, San Diego, 2007, pp.1-5.
- 262. P. Sridhar, A. M. Madni, M. JAMSHIDI, "Multi-Criteria Decision Making and Behavior Assignment in Sensor Networks," *Proceedings IEEE Systems Conference*, Waikiki, HI, April 10-12, 2007, 6pp.

- A. M. Madni, P. Sridhar, M. JAMSHIDI, "Fault-Tolerant Data Acquisition in Sensor Networks", *Proc. IEEE System of Systems Engineering Conference*, San Antonio, April 16-18, 2007, pp. 389-394.
- 264. F. Sahin, M. JAMSHIDI and P. Sridhar, "A Discrete Event XML based Simulation Framework for System of Systems Architectures ", <u>Proc. IEEE System of Systems</u> <u>Engineering Conference</u>, San Antonio, April 16-18, 2007, pp.382-388..
- 265. V. Raghavan and M. JAMSHIDI, "A GPS-Based Autonomous Rover Navigation ", <u>Proc. IEEE System of Systems Engineering Conference</u>, San Antonio, April 16-18, 2007, pp.486-491.
- 266. B. Horan, D. Creighton, S. Nahavandi, D. and M. JAMSHIDI, "A Bilateral Haptic Teleoperation of an articulated track mobile robot ", *Proc. IEEE System of Systems Engineering Conference*, San Antonio, April 16-18, 2007, pp.Z395-Z402.
- 267. H. Azarnoush, F. Mir, S. Agaian, and M. JAMSHIDI, "Alaryngeal Speech Enhancement Using Minimum Statistics Approach to Spectral Subtraction ", <u>Proc. IEEE System of Systems</u> <u>Engineering Conference</u>, San Antonio, April 16-18, 2007, pp. 576-580.
- 268. T. Nanayakkara, C. Piyathilaka, P. Siriwardana, A. Subasingha, and M. JAMSHIDI, "Development of Advanced Motor Skills in a Group of Humans Through an Elitist Visual Feedback Mechanism", *Proc. IEEE System of Systems Engineering Conference*, San Antonio, April 16-18, 2007, pp.408-413.
- 269. A. Jaimes, J. Gomez, S. Kota and M. JAMSHIDI, "An approach to surveillance an area using swarm of fixed wing and quad-rotor unmanned aerial vehicles UAV(s)", *Proc. IEEE System of Systems Engineering Conference*, Monterey Bay, CA, June 2-4, 2008, paper # 1569111991

270. M. Joordens, J. Serna, S. Songer, C. Friday, J. Hoy, R. Seiger, W. Madalinski and M. JAMSHIDI, "Low Cost Underwater Robot Sensor Suite", *Proc. IEEE System of Systems Engineering Conference*, Monterey Bay, CA, June 2-4, 2008, paper # 1569095252

271. A. Kumar Ray, M. Gupta, L. Behera and M. JAMSHIDI, "Sonar Based Autonomous Automatic Guided Vehicle (AGV) Navigation <u>*Proceedings 2008 IEEE SoSE Conference*</u>, Monterey Bay, CA, USA, June 2-4, 2008.

272. P. Benavidez, K. Nagothu, A. Kumar Ray, T. Shaneyfelt, S. Kota, L. Behera and M. JAMSHIDI, "Multi- Domain Robotic Swarm Communication System", *Proceedings 2008 IEEE SoSE Conference*, Monterey Bay, CA, USA, June 2-4, 2008.

273. T. Shaneyfelt and M. JAMSHIDI, "Towards Net-Centric System of Systems Robotics in Air, Sea and Land", *Proc. IEEE System of Systems Engineering Conference*, Monterey Bay, CA, June 2-4, 2008, paper # 1569101444

274. J. Prevost, M. A. Joordens, and M. JAMSHIDI," Simulation of Underwater Robots using Microsoft's Robot Studio©," *Proc. IEEE System of Systems Engineering Conference*, Monterey Bay, CA, June 2-4, 2008

275. S. S. Mirsaeid Ghazi and M. JAMSHIDI, "Adaptive Modeling: a Statistical Approach in Designing a Mathematical-model-based Controller", *Proc. IEEE System of Systems Engineering Conference*, Monterey Bay, CA, June 2-4, 2008, paper # 1569124597

276. K. Nagothu, M. Joordens, and M. JAMSHIDI, "Distributed Protocol for Communications Among Underwater Vehicles", *Proc. IEEE System of Systems Engineering Conference*, Monterey Bay, CA, June 2-4, 2008, paper # 1569108743, pp. 374-379.

277. C. Parisi, F. Sahin, and M. JAMSHIDI, "A Discrete Event XML based System of Systems Simulation for Robust Threat Detection and Integration," *Proc. IEEE System of Systems Engineering Conference*, Monterey Bay, CA, June 2-4, 2008,

278. T. Shaneyfelt, *M*. A. Joordens, K. Manoj Nagothu, and M. JAMSHIDI," RF Communication between Surface and Underwater Robotic Swarms," *Proceedings World Automation Congress*, Waikoloa, HI, September 28 – October 2, 2008.

279. M. Joordens and M. JAMSHIDI, "Low Cost Underwater Robot Sensor Suite", *Proc. IEEE System of Systems Engineering Conference*, Monterey Bay, CA, June 2-4, 2008, paper # 1569095252

280. Anjan Kumar Ray, Meenakshi Gupta, Laxmidhar Behera and Mo Jamshidi, "Sonar Based Autonomous Automatic Guided Vehicle (AGV) Navigation <u>Proceedings 2008 IEEE SoSE</u> <u>Conference</u>, Monterey Bay, CA, USA, June 2-4, 2008.

281. Patrick Benavidez, Kranthimanoj Nagothu, Anjan Kumar Ray, Ted Shaneyfelt, Srinath Kota, Laxmidhar Behera and Mo Jamshidi, "Multi- Domain Robotic Swarm Communication System". <u>Proceedings 2008 IEEE SoSE Conference</u>, Monterey Bay, CA, USA, June 2-4, 2008.

282. T. Shaneyfelt\* and M. JAMSHIDI, "Towards Net-Centric System of Systems Robotics in Air, Sea and Land", *Proc. IEEE System of Systems Engineering Conference*, Monterey Bay, CA, June 2-4, 2008, paper # 1569101444

283. K. Manoj Nagothu\*, M. Joordens\*, and M. JAMSHIDI, "Distributed Protocol For Communications Among Underwater Vehicles", <u>Proc. IEEE System of Systems Engineering</u> <u>Conference</u>, Monterey Bay, CA, June 2-4, 2008, paper # 1569108743

284. A. Moghadas, M. JAMSHIDI, and M., "Telemedicine in Health Care Systems," Proceedings of WAC 2008, September 28-October 2, 2008, Waikoloa, HI, USA, Paper # 4561299642.

285. M. JAMSHIDI, "System of Systems Engineering – Land, Sea and Air Applications," <u>Proceedings  $\delta^{th}$  International Conference on Applications of Fuzzy Systems and Soft Computing</u>, Helsinki, Finland, pp. 46-64.2008

286. T. Shaneyfelt, M. Joordens, K. Manooj and M. JAMSHIDI, "RF Communication Between Surface and Underwater Robotic Swarms," *Proceedings of WAC 2008*, September 28-October 2, 2008, Waikoloa, HI, USA

287. T. Shaneyfelt\*, M. Joordens\*, Kranthimanoj Nagothu, John Prevost, Anjan Kumar, S.S., Mirsaeid Ghazi, Mo JAMSHIDI, "Applications and Prototype for System of Systems Swarm Robotics," *Proc. IEEE SMC Conference*, Singapore, October 13-15, 2008, pp.1314-1319.

288. Matthew A. Joordens, T. Shaneyfelt\*, S. Eega\*, A. Jaimes\*\*, and M. JAMSHIDI, "Applications and Prototype for System of Systems Swarm Robotics," *Proc. IEEE SMC Conference*, Singapore, October 13-15, 2008, pp. 2049-2055.

289. Kranthimanoj Nagothu, Matthew Joordens, and Mo Jamshidi, "Communications for Underwater Robotics Research Platforms, "Proc. IEEE Systems Conference, Montreal, Canada, April 7-10, 2008.

290. K. Nagothu ,T. Shaneyfelt and M. JAMSHIDI , "System of System Communication for Heterogeneous Independent Operable Systems," *Proc. IEEE SoSE Conference*, Albuquerque, NM, June1-3, 2009.

291. S. Eega\*, M. Joordens\* and M. JAMSHIDI, "Design of Low Cost Thruster for an Autonomous Underwater Vehicle," *Proc. IEEE SoSE Conference*, Albuquerque, NM, June1-3, 2009.

292. A. Kumar Ray\*, P. Benavidez\*\*, L. Behera and M. JAMSHIDI, "Motion Coordination of Multi-agent Formation of Rovers," *Proc. IEEE SoSE Conference*, Albuquerque, NM, June1-3, 2009.

293. A. K. Ray\*, L. Behera, M. JAMSHIDI, "GPS and Sonar Based Area Mapping and Navigation by Mobile Robots," *Proc. IEEE INDIN Conference*, Cardiff, UK, June 23-26, 2009.

294. B. Kelley, and K. Manooj\*, and M. JAMSHIDI,"Broadband RF Communications in Underwater Environments Using Multi-carrier Modulation", *Proc. IEEE SMC Conference*, San Antonio, October 12-14, 2009, pp.2303-2308.

295. M. Joordens and M. JAMSHIDI, "Consensus-Based Control of Underwater Robots," *Proc. IEEE SMC Conference*, San Antonio, TX, Oct. 12-14, 2009, pp.3163-3168.

296. M. JAMSHIDI, "Control Paradigms for System of Manufacturing Systems," *Proc. IPROMS Conference*, Cardiff, Wales, UK, July 16-17, 2009.

297. Aleksandar Jevtić, Diego Andina1, Aldo Jaimes, Jose Gomez, and Mo JAMSHIDI, "Unmanned Aerial Vehicle Route Optimization Using Ant System Algorithm," <u>*Proc. IEEE SoSE Conference*</u>, Loughbrough, UK, June 2010.

298. Aldo Jaimes and Mo JAMSHIDI ,"Consensus-Based and Network Control of UAVs ," *Proc. IEEE SoSE Conference*, Loughbrough, UK, June 2010.

299. D. Shahgoshtasbi, S. Agaian, and M. JAMSHIDI," A Biological Speech Recognition System by Using Associative Neural Networks," *Proc. World Automation Congress*, Kobe, Japan, September 2010.

300. A. Jevtic, D. Andina, A. Jaimes, J. Gomez and M. JAMSHIDI," Unmanned Aerial Vehicle Route Optimization Using Ant System Algorithm," *Proc. World Automation Congress*, Kobe, Japan, September 2010. (**Won First Place – Best Paper Award**), paper # WED AM3.

301. J. Gomez and M. JAMSHIDI," Fuzzy Logic Control of a Fixed-Wing Unmanned Aerial Vehicle," *Proc. World Automation Congress*, Kobe, Japan, September 2010. (Won Second Place – Best Paper Award), paper# WED-PM2.

302. A. Panchul, D. Akopian, and M. JAMSHIDI," Time-Space Optimizing Fuzzy Logic Algorithm for Dynamic Load Balancing in Distributed Three-Dimensional Graphics Engine," *Proc. World Automation Congress*, Kobe, Japan, September 2010.
303. H. Berenji and M. JAMSHIDI, "Fuzzy Reinforcement Learning for System of Systems (SOS)," *Proc. Fuzz-IEEE*, Barcelona, July 2010, paper # 2396456420.

304. M. JAMSHIDI, "From Large-Scale Systems to SYSETM OF SYSTEMS – Control Challenges for the 21<sup>st</sup> Century," *Proc. IFAC LSS*, July, 2010, Lille, France, paper # Key-Mon-1.

305. P. Gazi, M. JAMSHIDI, A. Jevitc, and D. Andina, "A Mechatronic System Design Case Study: Control of a Robotic Swarm Using Networked Control Algorithms," <u>*Proc. IEEE Systems*</u> <u>*Conference*</u>, San Diego, CA, USA, April 2010 (Won First Place – Best Paper Award), paper # MON-PM3.

306. H. Berenji and M. JAMSHIDI, "Fuzzy Reinforcement Learning for Systems (SOS)," *Proc. Fuzz IEEE*, Taipei, Taiwan, June 27-30, 2011, paper # 4459851723.

307. S. Bakhtiari, S. Agaian, M. JAMSHIDI, "A Novel Empirical Mode Decomposition Based Systems for Medical Image Enhancement," *Prof. IEEE Systems Conf.*, Montreal, Canada, April 4-7, 2011, paper # 7754328641, pp. 4-9.

308. Kranthimanoj Nagothu, Brain Kelley, Jeff Prevost and Mo Jamshidi, "On Prediction to Dynamically Assign Heterogeneous Microprocessors to the Minimum Joint Power State to Achieve Ultra Low Power Cloud Computing", Asilomar Conference on Signals, Systems and Computers, CA, Nov-2011, paper # 6542221049.

309. P. Benavidez\*\* and M. JAMSHIDI, "'Mobile Robot Navigation and Target Tracking Systems," *Proc. IEEE SoSE 2011*, paper #1569433191, Albuquerque, NM, June27-31, 2011

310. D. Shahgoshtasbi and M. JAMSHIDI, "Energy efficiency in a smart house with an intelligent Neuro-Fuzzy lookup table," *Proc. IEEE SoSE 2011*, paper #1569453099, Albuquerque, NM, June27-31, 2011, 6pp.

311. A. Kumar Ray, G. McGinney, L. Behera, and M. JAMSHIDI," Coordinated Traffic Scheduling for Communicating Mobile Robots, "*Proc. IEEE SoSE 2011*, paper #1569453769, Albuquerque, NM, June27-31, 2011, 6pp.

312. J. Prevost\*, K. Manooj\*, B. Kelley, and M. JAMSHIDI, "Prediction of Cloud Data Center Networks Loads Using Stochastic and Neural Models, *Proc. IEEE SoSE 2011*, paper #1569453089, Albuquerque, NM, June27-31, 2011

313. M. Dziuk\* and M. JAMSHIDI, "Fuzzy Logic Controlled UAV Autopilot Using C-Mean Clustering," *Proc. IEEE SoSE 2011*, paper #1569453279, Albuquerque, NM, June27-31, 2011

314. S. Bakhtiari\*, S. Agaian, and M. JAMSHIDI,"The Integration of Alpha-Rooting and Ensemble Empirical Mode Decomposition for Image Contrast Enhancement," *Proc. SPIE Conference*, Orlando, FL, 2011, paper # 7653119840.

315. S. Bakhtiari\*, S. Agaian, and M. JAMSHIDI," An Enhanced Empirical Mode Decomposition Based Method for Image Enhancement, "*Proc. IEEE SMC Conference*, Anchorage, AK, October, 2011, paper # 7764329401.

316. T. Shaneyfelt\*, S. Agaian, M. JAMSHIDI, and S. Erdogan, "Quanterion number based vanilla system for automating pollination," *Proc. IEEE Int. Conf. on System Science and Engineering*, Macao, China, June 8-10, 2011, paper # Thu-IV-R1.

317. T. Shaneyfelt\*, S. Agaian, M. JAMSHIDI, and S. Erdogan," Vanilla Hypercomplex Recognition Machine Vision for Pollination," *Proc. IEEE SMC Conference*, Anchorage, AK, October, 2011, paper # 6539982734.

318. E. Bonab and E. Morales, and H. Krishnaswamy and M. JAMSHIDI "Bi-Directional Multi-Mode Grid Tied Converter for Solar Energy Conversion Systems," Proc. WAC 2012, Puerto Vallarta, Mexico Paper EDS # 1569538081.

319. D. Shahgoshtasbi\* and M. JAMSHIDI, "Modified Intelligent Energy Management System in a Smart House," Proc. WAC 2012, Puerto Vallarta, Mexico, Paper EDS # 1569524133.

320. J. J. Prevost\*, K. M. Nagothu\*, B. Kelley, and M. JAMSHIDI, "Load Prediction Algorithm for Multi-Tenant Virtual Machine Environments," Proc. WAC 2012, Puerto Vallarta, Mexico, Paper EDS # 1569572457, Best Paper Awardee.

321. Y. S. Manjili, A. Rajaee, B. Kelley and M. JAMSHIDI, "Optimization Using Fuzzy-Logic and Markov Chain Model for Micro-Grid Systems," Proc. WAC 2012, EDAS # 1569523895, Puerto Vallarta, Mexico.

322. D. Shahgoshtasbi and M. JAMSHIDI, "Energy efficiency in a smart house with an intelligent Neuro-Fuzzy lookup table," *Proc. IEEE SoSE 2011*, paper #1569453099, Albuquerque, NM, June27-31, 2011

323. Y S. Manjili, A. Rajaee, B. Kelley and M. JAMSHIDI,"Fuzzy-Logic Based Control for Battery Management in Microgrids," Proceedings of UTSA COS Conference, Paper presented at UTSA COS Conference (**Best Paper in Energy and Environment Section**), 2011

324. Amir Rajaee\*, KranthiManoj Nagothu\*, Brian Kelley, Mo Jamshidi, "Throughput Analysis for AMI Meters on Cognitive Radio Networks," *Proc. IEEE Systems Conference*, Vancouver, BC, Canada, March 19-23, 2012.

325. E. E. Bonab,\* O. Ghasemi, M. JAMSHIDI, and Y. Jin, "Adaptive Estimation over Distributed Sensor Networks with a Hybrid Algorithm," Proc. International Conference on Machine Learning and Cybernetics, Xi'an, China, June, 2012

326. R. Crosier\*, R.; Shuo Wang and M. JAMSHIDI, "A 4800-V grid-connected electric vehicle charging station that provides STACOM-APF functions with a bi-directional, multi-level, cascaded converter," Proc. IEEE Applied Power Electronics Conference and Exposition (APEC), Digital Object Identifier: 0.1109/APEC.2012.6166020, 2012, Pp. 1508 - 1515

327. Y S. Manjili\*, A. Rajaee\*, B. Kelley and M. JAMSHIDI,"Intelligent Decision Making for Energy Management in Microgrids1 with Air Pollution Reduction Policy," Proc. 6<sup>th</sup> IEEE SoSE, Genoa, Italy, July 16-18, 2012, EDAS # 1569592101

328. M. JAMSHIDI, "Sustainable Energy Systems: Cyber-Physical Based Mangement of Micro-Grids by a Fuzzy Systems Approach," *Proc. 2012 ICAFS*, (Invited Presentation), Lisbon, Portugal, August 29-31, 2012 (INVITED).

329. M. JAMSHIDI, "Sustainable Energy Systems: Cyber-Physical Based Intelligent Mangement of Micro-Grids," <u>Proc. 2012 Buda University Workshpop on Sytems Engineering</u>, Budapest, Hungary, September 10-12, 2012. (INVITED)

330. M. JAMSHIDI, "Sustainable Energy Systems Management with Environmental Constraints," Proc. LINDI Conference, Slovakia, September 6-7, 2012. (INVITED)

331. M. Niknamfar, Y. Manjili Sahraei\*, M. JAMSHIDI and M. Shadaram, "Cost Effective ROF Communication System for CATV Channels over WDM Network and Fuzzy Modeling of the System," *Proc. IEEE Workshop on Computing, Networking and Communication*, San Diego, CA, January 28-31, 2013.

332. K. Manoj, A. Rajaee, B. Kelley and M. JAMSHIDI, "Interference Aware Scheduling for Peak Channel Reuse and Max-Capacity In Smart Meter Networks," *Proc. IEEE Workshop on Computing, Networking and Communication*, San Diego, CA, January 28-31, 2013.

331. K. Manooj, B. Kelley and M. JAMSHIDI, "MIMO-Interference Aware Scheduling Enabling the Allocation of Unbounded Co-channels in Unplanned Networks," *Proc. IEEE Systems Conference*, Orlando, FL, April 15-17, 2013.

332. S. A. Henson, M. J. D. Henshaw, V. Barot, C.E. Siemieniuch, M.A. Sinclair, M. JAMSHIDI,
H. Dogan, S. L. Lim, C. Ncube, and D. DeLaurentis," Towards a Systems of Systems
Engineering EU Strategic Research Agenda," *Proc. IEEE Systems Conference*, Orlando, FL, April 15-17, 2013.

334, M. Niknamfar, Y.S. Manjili<sup>\*</sup>, M. Shadaram, M. JAMSHIDI, "Fuzzy modeling of an ROF communication system for CATV channels over DWDM network", Proc. ABES 2012, UTSA,TX. (Best Paper Award winner)

335. B. K. Tannahill\*, <u>C. E.</u> Maute\*, Y. Yetis\*, M. N. Ezell\*, A. Jaimes\*, R. Rosas\*\*, A. Motaghi\*, H. Kaplan\*, and M. JAMSHIDI, "Modeling of System of Systems via Data Analytics – Case for "Big Data" in SoS," *Proc. 8thIEEE SoSE*, Maui, HI, June 2-4, 2013, EDAS # 1569744777

336. T. S. Shaynefelt\*, M. JAMSHIDI, and S. Agaian," Hierarchical Robotic Crane System for Post Grid Array Environments," *Proc. 8thIEEE SoSE*, Maui, HI, June 2-4, 2013, "EDAS# 1569736353

337. E. Bonab\*, O. Sadeghi, M. JAMSHIDI, and Y. Jin," Time Delay Estimation in Gene Regulatory Networks, "*Proc. 8thIEEE SoSE*, Maui, HI, June 2-4, 2013, "EDAS# 1569747703

338. A. Daali\*, Y. Huang and M. JAMSHIDI," A System based Approach to Construct a Kaposi Sarcoma-Associated Herpesvirus (KSHV) Specific Pathway Crosstalk Network "*Proc. 8thIEEE SoSE*, Maui, HI, June 2-4, 2013, EDAS# 1569747605.

339. J. Prevost, K. Manooj and M. JAMSHIDI, "Optimal Update Frequency Model for Physical Machines State Change and Virtual Machine Placement in the Cloud," *Proc. 8thIEEE SoSE*, Maui, HI, June 2-4, 2013, "EDAS# 1569744689.

340. P. Benavidez, Josue Lambert, Aldo Jaimes and M. JAMSHIDI, "Landing of a Quadcopter on a Mobile Base using Fuzzy Logic," *Proc. 3<sup>rd</sup> World Conference on Soft Computing*, San Antonio, TX, December 16-18, 2013, EDAS # 1569816599.

341. M. Ezell, A. Motaghi and M. JAMSHIDI," Alpha-Rooting Image Enhancement Using a Traditional Algorithm and Genetic Algorithm," *Proc. 3<sup>rd</sup> World Conference on Soft Computing*, San Antonio, TX, December 16-18, 2013, EDAS # 156981805613.

342. Y. Yetis\*, H. Kaplan\*, and M. JAMSHIDI, Stock Market Prediction Using With Artificial Neural Network," *Proc. 3<sup>rd</sup> World Conference on Soft Computing*, San Antonio, TX, December 16-18, 2013, EDAS # 1569815967

343. S.A. Henson, M.J.D. Henshaw, V. Barot, C.E. Siemieniuch, M.A. Sinclair, H. Dogan, S.L. Lim, C. Ncube, M. JAMSHIDI, and D. De Larentis, "Towards a Systems of Systems Engineering EU Strategic Research Agenda", *Proc.* 8<sup>th</sup> *IEEE SoSE*, Maui, Hawaii, USA, June 2-6, 2013.

344. B. K. Tannahill\* and M. JAMSHIDI, "Modeling of System of Systems via Data Analytics – Case of "Big Data" in SoS," Proc. 7<sup>th</sup> International Conference on Soft Computing, Computing

with Words and Perceptions in System Analysis, Decision and Control", Izmir, Turkey, September 2-3, 2013, pp. 1-11.

345. B. Tannahill and M. JAMSHIDI, "Big Data Analytic Paradigms - From PCA to Deep Learning, "*Proc. AAAI Workshop*, Stanford, CA, March 2014.

346. M. K. Muppidi, S. Vaishnav, M. JAMSHIDI, and M. Joordens, "AUV location detection in an enclosed environment," EDAS Number <u>1569917517</u>, *Proc. WAC*, Waikoloa, HI, August 3-7, 2014.

347 A. Moussavi-Khalkhali and M. JAMSHIDI, "Leveraging Machine Learning Algorithms to Perform Online and Offline Highway Traffic Flow Prediction," Proc. Workshop of Machine Learning for Predictive Models (MLPM 2014), Detroit, MI, 2014.

348. L. Roiné; K. Therani; Y. Sahraei Manjili; M. JAMSHIDI, "Microgrid Energy Management System Using Fuzzy Logic Control," *Proc. WAC 2014*, Waikoloa, HI, USA, August 4-6, 2014.EDAS : 1569917527

349. Y. Yetis, H. Kaplan, and M. JAMSHIDI, "Stock Market Prediction by Using Artificial Neural Network," *Proc. WAC 2014*, Waikoloa, HI, USA, August 4-6, 2014, EDAS : 1569925719.
350. P. Benavidez, M. Muppidi, and M. JAMSHIDI, "Improving Visual SLAM Algorithms for use in Realtime Robotic Applications," *Proc. WAC 2014*, Waikoloa, HI, USA, August 4-6, 2014,

EDAS : 1569945045.

351. J. Prevost, M. JAMSHIDI, K. Manooj and B. Kelley, "Optimal Calculation Overhead for energy Efficient Cloud Workload Prediction," *Proc. WAC 2014*, Waikoloa, HI, USA, August 4-6, 2014, EDAS: 1569926019.

352. M. Muppidi, S. Vaishnav, M. JAMSHIDI and M. Joordens, "AUV location detection in an enclosed environment," *Proc. WAC 2014*, Waikoloa, HI, USA, August 4-6, 2014, EDAS : 1569917517.

353. Y. Yetis and M. JAMSHIDI, "Forecasting of Turkey's Electricity Consumption Using Artificial Neural Network," *Proc. WAC 2014*, Waikoloa, HI, USA, August 4-6, 2014, EDAS : 1569925721.

354. M. Saedy, A. Rajaee, M. JAMSHIDI, and N. H. Jamshidi, "Method and System for Educational Networking," *Proc. WAC 2014*, Waikoloa, HI, USA, August 4-6, 2014, EDAS : 1569925411.

355. Y.S. Manjili, M.Niknamfar, M. Jamshidi and R. Vega, "Real-time Monitoring of Multi-mode Industrial Processes using Feature-extraction Tools," *Proc. WAC 2014*, Waikoloa, HI, USA, August 4-6, 2014, EDAS : 1569925712.

356. M. Roopaei, S. Agaian, and M. JAMSHIDI," Thermal Imaging in Fuzzy Condition Monitoring," *Proc. WAC 2014*, Waikoloa, HI, USA, August 4-6, 2014, EDAS : 1569952712.
357. J. Labrado, P. Benavidez, and M. JAMSHIDI," Autonomous Controller Design for an Orbital Debris Chaser Craft," Proc. IEEE Systems Conference, Vancouver, BC, Canada, April, 2015, EDAS # 1570065051.

358. P. Benavidez, M. Muppidi, P. Rad, J. Prevost, and M. JAMSHIDI," Cloud-Based Real-time Robotic Visual SLAM," Proc. IEEE Systems Conference, Vancouver, BC, Canada, April, 2015, EDAS # 1570065191.

359. M. Muppidi, P. Rad, A. Jaimes, S. Agaian and M. JAMSHIDI," A Novel Image Encryption Method to Reduce Decryption Execution Time in Cloud," Proc. IEEE Systems Conference, Vancouver, BC, Canada, April, 2015, EDAS # 1570065201

## **REVIEWED JOURNAL PAPERS**

(\* Graduate Student \*\* Minority Graduate Student)

- 1. M. JAMSHIDI, G. D'Ans and P. V. Kokotovic, "Applications of a Parameter-Imbedded Riccati Equation," IEEE Trans. Auto. Control, Vol. AC-15, No. 6, December, 1970.
- 2. M. JAMSHIDI, "A Parameter Adjustable Regulator for a Winding Process," Int. Journal of Control, Vol. 8, No. 5, September, 1972.
- 3. M. JAMSHIDI, "Three-Stage Near-Optimum Design of Nonlinear Control Processes," Proc. IEE, Vol. 121:886-892.
- 4. Malek-Zavarei, M. E. Mokari-Bolhassan and M. JAMSHIDI, "Optimal Scheduling for Industrial Processes," Pazhoohandeh Research Journal, Ministry of Science and Higher Education, Tehran, Iran, No. 6, September, 1974
- 5. M. JAMSHIDI, " A Three-Stage Design of Non-Linear Control Systems with Time Delay," Int. Journal of Control, Vol. 21, No. 5, 1975.
- 6. M. Razzaghi and M. JAMSHIDI, "On the Jacobi Condition for Control Problems with Input Delay," Proc. IEE, Vol. 122, No. 11, November, 1975.
- 7. M. JAMSHIDI and M. Razzaghi, "Optimization of Linear Systems with Input Time-Delay," Kybernetika, Vol. 11, No. 5, 1975.
- 8. M. JAMSHIDI, "Optimal Control of Non-Linear Power Systems by an Imbedding Method," IFAC J. Automatica, Vol. 11, No. 6, November 1975.
- 9. M. JAMSHIDI, "Analog Computer-Aided Design of a Constant Pressure Water Reservoir System," *IEEE Trans. Ind. Elect. and Control Instrumentation.*, Vol. IECI-22, No. 3, August, 1975. 10. M. JAMSHIDI and F. Boettiger \*, "A Parameter Imbedding Solution of Algebraic Matrix Riccati
- Equation," Int. Journal of Control, 1976.
- 11. M. JAMSHIDI and M. Razzaghi, "Near-Optimum Design of a Class of Non-Linear Control Systems with Time-Delay," Iranian Journal of Science and Technology, Vol. 4, No. 4, 1975.
- 12. M. JAMSHIDI, "A Feedback Near-Optimum Control for Non-Linear Systems," Information and Control, Vol. 32, No. 1, September, 1976.
- 13. M. JAMSHIDI, "Application of Three Time-Scale Near-Optimum Design to Control Systems," Automatic Control Theory and Applications, 1976.
- 14. K. -C. Chu, M. JAMSHIDI and R. E. Levitan, "An Approach to On-Line Power Dispatch with Ambient Air Pollution Constraints," IEEE Trans. Auto. Cont., Vol. AC-22, June, 1977, pp. 385-396.
- 15. M. JAMSHIDI, "Optimization of Some Dynamic Industrial Control Processes by Analog Computer," Transactions of IACS, 1976.
- 16. M. JAMSHIDI, "Optimization of Water Resources Systems with Statistical Inflows," Proc. IEE, Vol. 124, January, 1977.
- 17. M. JAMSHIDI and M. Heidari, "Application of Dynamic Programming to Control Khuzestan Water Resources System," IFAC J. Automatica, Vol. 13, No. 3, May, 1977.
- 18. M. JAMSHIDI, "A Large-Scale Optimal Stochastic program for Operation of Khuzestan Water Resources System," Iranian J. of Science and Technology, 1978.
- 19. K. -C. Chu, M. JAMSHIDI and R. E. Levitan, "Real-Time Urban Power dispatch with Ambient Air Quality Constraints," IFAC J. Automatica, Vol. 14, January, 1978.

- 20. M. JAMSHIDI, "An Imbedded Initialization of Newton's Algorithm for Matrix Riccati Equation," IFAC J. Automatica, Vol. 14, May, 1978, pp. 167-170.
- 21. R. J. Peters, K. C. Chu and M. JAMSHIDI, "Optimal Operation of a Water Resources System by Stochastic Programming," Journal Mathematical Programming, Study g, 1978.
- 22. M. JAMSHIDI, M. Malek-Zavarei and I. Vakilzadeh, "Problems of Automatic Control Education in Developing Countries," IFAC Journal Automatica, vol. 16, January, 1979, pp. 105-112.
- 23. M. JAMSHIDI, "An Overview on the Solutions of the Algebraic Matrix Riccati Equation and Related problems," J. Large Scale Systems, 1980, vol. 1, pp. 167-192.
- 24. M. JAMSHIDI, Book Review, "Structure of Interconnected Systems," IEEE Circuits and Systems Magazine, 1980.
- 25. M. JAMSHIDI and M. Malek-Zavarei, Book Review, ORACLS, A Design System for Linear Multivariable Control, IEEE Control Systems Magazine, vol. 1, no. 1, Mar. 1981.
- 26. P. Dorato and M. JAMSHIDI, "Some comments on optimal collection of solar energy," Solar Energy, 1982.
- 27. M. JAMSHIDI and C. J. Herget, "Computer-Aided Control Systems Engineering," IEEE Control Systems Magazine, Vol. 2, No. 4, November, 1982, pp.-2.
- 28. M. JAMSHIDI and M. Malek-Zavarei, "A Hierarchical control of large-scale time-delay systems," J. Large-Scale Systems, vol. 4, 1983, pp. 149-163.
- 29. M. JAMSHIDI and A. T. Bahill, Book Review, "Control of time-delay systems," IEEE Control Systems Magazine, vol. 2, No.2, Jun. 1982, pp. 21-22.
- 30. M. JAMSHIDI and C. M. Wang,\* "Optimization of large-scale nonlinear time-delay systems," IEEE Transactions on System, Man and Cybernetics, vol. SMC-14, no. 1, pp. 209, Jan., 1984.
- 31. J. M. Brideau,\* and M. JAMSHIDI, "Optimal control of large scale nonlinear systems with time delay," Int. Journal of Control, 1984, vol. 7, pp. 33-46.
- 32. C. -M. Wang\* and M. JAMSHIDI, "Optimal control of large-scale nonlinear systems with time delay," Int. Journal of Control, vol. 39, No. 4, pp. 683-699, 1984.
- 33. M. JAMSHIDI, G. S. Axelby, O. I. Franksen, and N.B. Nichols, "A Century of IEEE, "IEEE Control Systems Magazine, Vol. 4, No. 4, November, 1984.
- 34. R. E. Salters\*\* and M. JAMSHIDI, "On the aggregation of large-scale stochastic systems with multiplicative noise," J. of Large-Scale Systems, vol. 11, pp. 31-42, 1986.
- 35. M. Shahinpoor, M. JAMSHIDI, and Y. T. Kim \*, "Exact solution to the inverse kinematics problem of a standard 6-axis robot manipulator," J. Robotic Systems, vol. 3, No. 3, pp. 259-280, 1986.
- 36. M. JAMSHIDI, R. Morel,\* T. C. Yenn,\* and J. Schotik,\* "Computer-aided design of systems and networks packages and languages," Advances in Computer-Aided Control Systems Engineering, M. Jamshidi and C. J. Herget (eds.), North-Holland, Amsterdam, 1985.
- 37. H. Seraji, M. JAMSHIDI, Y. T. Kim,\* and M. Shahinpoor, "Linear control of two-link nonlinear robot manipulators, " J. Robotic Systems, vol. 3, no. 4, pp. 349-365, 1986.
- 38. J. M. Santiago\*\* and M. JAMSHIDI, "On the extensions of balanced method of model reduction," Int. J. Control Theory and Advanced Technology, Vol. 2, No. 2, pp. 207, 226, 1986.
- 39. M. Tarokh\* and M. JAMSHIDI, "Elimination of decentralized fixed modes with minimum number of interconnection gains," <u>J. Large-Scale Systems</u>, vol. 11, 1987, pp. 207-215. 40. F. Asamoah\*\* and M. JAMSHIDI, "Lyapunov stability of bilinear large-scale systems," <u>J. Large-</u>
- Scale Systems, vol. 11, pp. 69-79, 1986.
- 41. Y. -T. Kim\*, M. JAMSHIDI, and M. Shahinpoor, "On near-optimum control of robot manipulators," Int. J. Robotics and Automation, 1987.

- 42. F. Asamoah\*\* and M. JAMSHIDI, "Stabilization of a class of singularly perturbed bilinear large-scale systems," *Int. J. Control*, 1987, pp. 1587-1594.
- 43. M. JAMSHIDI, H. Seraji, and Y. T. Kim,\* "Decentralized control of nonlinear robot manipulators," *J. Robotics and Autonomous Systems*, vol. 3, pp. 261-370, 1987.
- 44. Z. Huang and M. JAMSHIDI, "On linear aggregation of input output analysis," *J. of Systems Engineering*, Vol. 24, no. 1, 1987 (in Chinese).
- 45. M. JAMSHIDI, "Robots in Manufacturing," *Robotics and Computer Integrated Manufacturing*, vol. 6, No. 4, 1989.
- 46. S. O'Neill\* and M. JAMSHIDI, "Robot\_S: An interactive robot simulation language," *<u>Robotics</u>*, Vol. 14, No. 3, pp. 245-256, 1989.
- 47. M. JAMSHIDI, "Multi-Arm Robotics," Robotics and Autonomous Systems, Vol. 5, No. 4, 1989.
- 48. M. JAMSHIDI, "Fixed and flexible robots," editorial, J. Robotic Systems, Vol. 6, No. 4, 1989.
- 49. M. Aldeen and M. JAMSHIDI, "On a decentralized control of large-scale systems with modal reduction," *Int. J. Comp. and Elect. Engr.*, Vol. 16, No. 2, 1990, pp. 99-103.
- 50. H. Bolandi,\* R. L. Carroll, and M. JAMSHIDI, "Discrete-time model reference adaptive control of robot manipulators," *Iranian J. Science and Technology*, 1992.
- 51. J. N. Liou,\* M. JAMSHIDI, and G. P. Starr, "Adaptive edge-tracking control of an industrial
- 52. robot," J. of Robotics and Computer Integrated Manufacturing, Vol. 6, No. 4, pp. 331-337, 1989.
- 53. F. Asamoah,\*\* and M. JAMSHIDI, "Response to comments on Lyapunov stability of bilinear large-scale systems," *Infor. & Decision Technologies*, 1990.
- 54. M. JAMSHIDI, "Robots in Unstructured Environments," J. of Robotics and Automation, 1990.
- 55. M. JAMSHIDI, "Intelligence in Robotics and Manufacturing," editorial, *J. of Intelligent and Robotic Systems*, Vol. 3, No. 1, 1990.
- 56. Z. Geng\* and M. JAMSHIDI, "On the expert system control of robot manipulators," <u>J. Robotic and</u> <u>Intelligent Systems</u>, 1991.
- 57. M. JAMSHIDI and C.-S. Tseng,\* "On robust decentralized control of a 5-axis robot," *J. Robotics and Computer-Integrated Manufacturing*, Vol. 5, No. 4, pp. 309-316, 1990.
- 58. B.-J. Oh\*, M. JAMSHIDI, and H. Seraji, "Two adaptive control structures of robot manipulators," *IFAC J. Automatica*, 1991.
- 59. B. -J. Oh\* and M. JAMSHIDI, "Decentralized adaptive control of robot manipulators," *J. Robotic Systems*, Vol. 6, No. 4, 1989, pp. 461-483.
- 60. W. Horne,\* M. JAMSHIDI, and N. Vadiee,\* "Neural Networks in Robotics a Survey," J. Intelligent and Robotic Systems, Vol. 3, No. 1, pp. 51-66, 1989.
- Z. Geng\* and M. JAMSHIDI, "Learning control systems analysis and design based on a 2-D systems theory," *J. Intelligent and Robotic Systems*, Vol. 3 No. 1, pp. 17-26, 1990.
   M. JAMSHIDI, "Sensors and Interfacing in Robotic Manufacturing," R*obotics and Computer*
- 62. M. JAMSHIDI, "Sensors and Interfacing in Robotic Manufacturing," Robotics and Computer Integrated Manufacturing, Vol. 7, 1991.
- 63. M JAMSHIDI, "Large-Scale Systems Modeling and Control," in <u>Circuits, Systems, and</u> <u>Information, M. Jamshidi, M. Mansour, B. O. D. Anderson and N. Bose (eds.), TSI Press,</u> Albuquerque, NM, 1991.
- 64. C. Abdallah, D. Dawson, P. Dorato, and M. JAMSHIDI, "Survey of robust control of robots," *IEEE Control Systems Magazine*, Vol. 10, 1991.
- 65. M. JAMSHIDI and V. Salminen, "Mechatronics," editorial, *Int. J. Computers & Electrical Engineering*, Vol. 18, No. 3., 1992.
- 66. R. Lumia and M. JAMSHIDI, "Robotics and Manufacturing Research at National Institute for Standards and Technology," *J. Intelligent and Robotics Systems*, Vol. 4, 1992.

- 67. M. JAMSHIDI and C. Gosselin, "Trends in Robot Kinematics, Dynamics, Control, Sensing, Programming, and Simulation " *J. Robotics and Autonomous Systems*, 1992, pp. 199-200.
- 68. M. JAMSHIDI and D. Cherchas, "Flexible and Redundant Robots, " J. Robotics and Computer-Integrated Manufacturing, Vol. 9. No. 2, 1992, pp. 85-86.
- 69. M. JAMSHIDI, "Research and Education in Robotics and Manufacturing Systems, ", <u>J. Robotics</u> and Computer-Integrated Manufacturing, Vol. 1, No. 1, 1992, p.1.
- 70. M. JAMSHIDI and S. Hayati, "Robots in Unstructured Environments," editorial, <u>J. Robotic</u> <u>Systems</u>,1992.
- 71. M. JAMSHIDI, "Artificial Intelligent Robotics and Manufacturing, " editorial, <u>J. Expert Systems</u> <u>and Applications</u>, Vol. 4, No. 3, 1992, pp. 271-272.
- 72. M. JAMSHIDI, "Automation in Manufacturing Systems," editorial, *Int. J. Systems Automation* <u>Research and Applications</u>, 1992.
- 73. M. JAMSHIDI and P. Dauchez, "Parallel and Multiple Manipulators, " editorial, *Int. J. Robotics and Automation*, 1992.
- 74. J. White, R. Brittain, R. Kisner, and M. JAMSHIDI, "Advance Control Architectures for Nuclear Reactor," <u>Control Theory and Advanced Technologies</u>, Vol. 8, September, 1992.
- 75. B. -J. Oh\*, M. JAMSHIDI, and H. Seraji, "Adaptive decentralized control of robot manipulators", J. of Intelligent and Robotic Systems, 1992.
- 76. J. Mullins, M. Shahinpoor, M. JAMSHIDI, G. P. Starr, and S. Kassicieh, "Robotics and Manufacturing Education and Research - The New Mexico Initiative, " <u>J. Robotics and Computer-Integrated Manufacturing</u>, Vol. 9, 1992, pp. 15-25
- 77. M. JAMSHIDI, "Editorial on Adaptive Signal processing, " *Int. J. Computers & Electrical Engineering*, Vol. 18, No. 3/4., 1992.
- 78. J. N. Liou\* and M, JAMSHIDI, "Adaptive robust force robot control of contour following robotic system," *J. Robotics and Autonomous Systems*, Vol. 5, 1992, pp. 283-297.
- 79. N. Vadiee\* and M. JAMSHIDI, "A new paradigm for intelligent control", *Int. J. Computers & Electrical Engineering*, Vol. 18, No. 2., 1992.
- 80. M. JAMSHIDI and Z. Geng\*, "A learning 2D control approach for robot manipulators, " *J. Expert Systems and Applications*, 1992, pp. 297-304.
- 81. R. D. Colbaugh and M. JAMSHIDI "An adaptive impedance control scheme for robotic solid waste handling, " *J. Robotic Systems*, 1992.
- 82. S. -R. Lee\* and M. JAMSHIDI "On the stability of large-scale time-delay systems," Kybernetika, 1992.
- 83. S. -R. Lee\* J. Davis, and M. JAMSHIDI "On the Lyapunov stability of large-scale systems wit time delays, "*J. Control Theory and Advanced Technology*, 1991.
- 84. W. Honey\* and M. JAMSHIDI "ROBO\_SIM A simulation environment for robots, *Robotics and Autonomous Systems*, Vol. 9, No. 4, 1992, pp. 305-317.
- 85. J. Benitez-Read\*\*, M. JAMSHIDI, and R. Kisner, "Advanced control designs for nuclear reactors," *J. Control Theory and Advanced Technology*, Vol. 8, No. 3, 1992, pp. 447-464.
- J. Benitez-Read\*\* and M. JAMSHIDI, "Adaptive input-output linearizing control of nuclear reactors," <u>J. Control Theory and Advanced Technology</u>, Vol. 8, No. 3, 1992, pp. 535-545.
- 87. Z. Geng\*, R. L. Carroll, and M. JAMSHIDI and, "A learning 2D control approach for the EBRII nuclear reactor," *J. Control Theory and Advanced Technology*, 1992.
- Z. Geng\*, R. L. Carroll, M. JAMSHIDI and, R. A. Kisner "An adaptive learning control approach with application to water tank level control, " <u>J. Control Theory and Advanced Technology</u>, Vol. 8, No. 3, 1992, pp. 577-592.

- Z. Geng\*, R. L. Carroll, and M. JAMSHIDI "An adaptive learning estimator and controller for nuclear reactors," *J. Control Theory and Advanced Technology*, 1992.
- 90. M. JAMSHIDI, M. and M. Shahinpoor "Environmentally Conscious Manufacturing, " Int. J. Conscious Manufacturing, Vol. 1, No. 1, 1992, p. 1.
- 91. R. Marchbank\* and M. JAMSHIDI, "A Fuzzy Control Approach to a Two-Axis Mirror Laser Beam Alignment System," *J. on Engineering Applications of AI*, 1993.
- 92. W. Parkinson\*, P. D. Shalek, K. H. Duerre, G. F. Luger, and M. JAMSHIDI, "Two Intelligent Control Systems for Silicon Carbide Whisker Production " *Journal of Intelligent and Fuzzy Systems*, Vol. 1, NO. 3, 1993.
- M. JAMSHIDI and M. Bayoumi, "Robot Control Position, Force, and Impedance," <u>J. Intelligent</u> and Robotic Systems, Vol. 5, 1993.
- 94. M. JAMSHIDI, R. V. Patel, and B. Bavarian, "Neural Networks and Fuzzy Logic in Robotics and Manufacturing," editorial, *Int. J. Computers & Electrical Engineering*, Vol. 18, No. 2., 1993.
- 95. M. JAMSHIDI and C. C. Nguyen, (eds.) Special Issue on Parallel Robots and Mechanisms, " Journal of Robotic Systems, 1993.
- 96. M. JAMSHIDI and T. J. Ross, "Intelligent and Fuzzy Systems, an Editorial, " *Journal of Intelligent* and Fuzzy Systems, Vol. 1,1993.
- 97. J. Benitez-Read\*\*, M. JAMSHIDI, and C. Abdallah "Robust adaptive control of nuclear reactors," J. Iranica Scientia, Vol. 1, 1993.
- D. Barak\* and M. JAMSHIDI "Fuzzy Control of an Environmentally Conscious Refrigeration System," *Journal of Intelligent Manufacturing*, 1994.
- 99. C. Hwang, M. Saif, and M. JAMSHIDI "Fault Detection and Diagnosis of a Nuclear Power Plant Using Artificial Neural Networks", *Journal of Intelligent and Fuzzy Systems*, Vol. 2, 1995.
- 100. N. Vadiee\* and M. JAMSHIDI, "A Tutorial on Fuzzy Rule-Based Expert System (FRBES) Models 1 : Mathematical Foundations," *Journal of Intelligent and Fuzzy Systems*, Vol. 1, No. 2, 1993, pp. 171-188
- 101. N. Vadiee\* and M. JAMSHIDI, "Fuzzy Rule-Based Expert Systems 1: Inference Schemes", *Journal of Intelligent and Fuzzy Systems*, Vol. 1, No. 3, 1993, to appear
- 102. A. Martinez\*\*, E. Tunstel\*\* and M. JAMSHIDI, "Fuzzy Logic Based Collision Avoidance of a Mobile Robot", *Robotica*, vol. 12, Part 6, 1994, pp. 521-527.
- M. JAMSHIDI and L. A. Zadeh, Welcome Editorial for Inaugural Issue, *Iranica Scientia*, Vol. 1, No. 1, 1994.
- E. Tunstel\*\*, and M. JAMSHIDI, "On Genetic Programming of Fuzzy Rule-based Systems for Intelligent Control", *Int'l. Journal of Intelligent Automation and Soft Computing*, Vol. 2, No. 2, 1996.
- M. JAMSHIDI, A. Titli and J.-P. Martin\*, "On the Stability of Fuzzy Control Systems: Time and Frequency-Domain Methods," *Intelligent Automation and Soft Computing*, Vol. 4, pp. 109-125, 1998.
- M. JAMSHIDI and L. A. Zadeh, "Fuzzy Control Systems An Introduction, *Iranica Scientia*, Vol. 2, No. 4, 1996, p. vii.
- 107. K. Kumbla\* and M. JAMSHIDI, "Hierarchical Control of Robotic Manipulators", in *Journal* of *Intelligent and Fuzzy Systems*, Vol. 4, 1996.
- S. Heger, A. S., N. K. Alang-Rashid\*, and M. JAMSHIDI., "Application of Fuzzy Logic in Nuclear Reactor Control, Part I: An Assessment of State-of-the-Art, "*Nuclear Safety Journal*, Vol. 36, No. 1, 1996.

- S. Heger, A. S., N. K. Alang-Rashid\*, and M. JAMSHIDI. Simulation Studies of Nuclear Reactor Control Using Fuzzy Logic. *Journal of Intelligent and Fuzzy Systems*, 1995.
- E. T. Tunstel\*\*, S. Hockemeier, and M. JAMSHIDI, "Fuzzy Control of a Hovercraft Platform", *Engineering Applications of Artificial Intelligence*, Special Issue: "Control Applications of Fuzzy Logic", Vol. 7, No. 5, October 1994, pp. 513-519.
- M. JAMSHIDI, Book Review, Control Systems by P. Belanger, *IEEE Control Systems* <u>Magazine</u>, Vol. 16, 1996.
- E. Tunstel\*\*, M. JAMSHIDI, "On Genetic Programming of Fuzzy Rule-Based Systems for Intelligent Control," <u>AutoSoft Journal</u>, Vol. 2, No. 3, 1996, pp. 215-222.
- 113. M. JAMSHIDI, "Fuzzy Control of Complex Systems," *International Journal of Soft Computing*, Inaugural Issue (Invited), Springer-Verlag, Germany, 1996.
- 114. H. Xue\*, M. JAMSHIDI, and E. Tunstel\*\*, "Genetic Algorithms for Optimization of Fuzzy Systems in Prediction and Control, "<u>Int. Journal of Knowledge-Based Intelligent</u> <u>Engineering Systems</u>, Vol. 1, No.1, 1997, pp. 13-21.
- 115. M.-R. Akbarzadeh-T\*, and M. JAMSHIDI, "Evolutionary Fuzzy Control of A Flexible Link," *Journal of Intelligent Automation and Soft Computing*, Vol. 3, No. 1, pp. 77-88, 1997.
- 116. E. Tunstel\*\*, T. Lippincott\*\* and M. JAMSHIDI, "Mobile Robots: Fuzzy -Behavior Modulation and Evolution, "*Int'l. Journal of Intelligent Automation and Soft Computing*, Vol. 3, No. 1, 1997, pp. 37-49.
- 117. M. JAMSHIDI, "Fuzzy Logic Systems", *Encyclopedia of Electrical & Electronic Engineers*, J. Wiley & Sons, J. G. Weber (ed.), New York, 1998.
- 118. M. JAMSHIDI, "Large Complex Systems," (McGraw Hill), *Encyclopedia of Science and Technology*, New York, 7<sup>th</sup>, Edition, 1999.
- 119. C. Guo, P. Sarkar\* and M. JAMSHIDI, "Soft-Computing Based Intelligent Controller and its Application to a Nonlinear System," *AutoSoft Journal*, 2002.
- 120. C. Guo, Z. Ye, Z. Sun, P. Sarkar\* and M. JAMSHIDI, "A Hybrid Fuzzy Cerebellar Model Articulation Controller Based Autonomous Controller ", *Int. Journal on Computers and Electrical Engineering*, Vo. 28, No. 1, pp. 1-16, 2002.
- 121. M. JAMSHIDI, D. Padilla\*\* and M. de Oliveira\*, "Intelligent Evolving Soccer Robots: Part 1 Fuzzy Logic Fundamentals," <u>*Robot Science and Technology Magazine*</u>, Vol. 1, Nov., 1998, pp. 8-13
- 122. M. JAMSHIDI, D. Padilla\*\* and M. de Oliveira\*, "Intelligent Evolving Soccer Robots: Part 2 Genetic Algorithms, <u>*Robot Science and Technology Magazine*</u>, Vol. 1, March, 1999, pp. 22-26
- 123. M. Akbarzadeh\*, K. Kumbla\*, E. Tunstel\*\*, Jr. and M. JAMSHIDI, "Soft Computing for autonomous robotic systems," *Int. Journal of Computers and Electrical Engineering*, Vol. 26, No. 1, 2000, pp. 5-32.
- 124. M. JAMSHIDI and J. Johnson III, "Editorial- Science and Technology Research at NASA University Research Centers," *Int. Journal of Computers and Electrical Engineering*, Vol. 26, No. 1, 2000, pp. 1-4.
- 125. M. Kamel and M. JAMSHIDI, Editorial," Autonomous Agents," *Intelligent Automation and Soft Computing*, Vol. 6, No. 3, 2000, pp. 171-172.
- 126. M. Kamel and M. JAMSHIDI, Editorial," Distributed Manufacturing Systems," *Journal of Intelligent Manufacturing*, Vol. 11, No. 3, 2000, p. 235.

- 127. M. Johnson\*\*, K. Firoozbakhsh, M. Moneim and M. JAMSHIDI, "Flexor Tendon Repair Techniques: Multi-Objective Decisions by Soft Computing," *IEEE Transactions* on Engineering in Medicine and Biology, Vol. 20, No. 1, March, 2002, pp. 345-360.
- S. Berman\*, Y. Edan and M. JAMSHIDI, "Decentralized Autonomous Automatic Guided Vehicles in Material Handling," *IEEE Transactions on Robotics and Automation*, 2003.
- M. JAMSHIDI, "Autonomous Control of Complex Systems: Robotic Applications," <u>Applied Mathematics and Computation</u>, Vol. 120, Issue 1-3, pp. 15-29, 2001.
- 130. A. El-Osery\* and M. JAMSHIDI, "Image Enhancement Using a Fuzzy Expert System," *Soft Computing*, Vol. 7, pp. 97-106, 2002.

131. <u>S. Berman\*, Y. Edan and M. JAMSHIDI, "Simulation in the Development of a Control</u> <u>Strategy for an Automated Guided Vehicle System," *System Analysis Modeling and* <u>Simulation Journal</u>, Vol. 42, No.2, pp. 23-39, 2002.</u>

- 132. M. JAMSHIDI, "Autonomous Control of Complex Systems Space and earth bound applications," *System Science Journal*, pp. 451-468,2002..
- 133. M. JAMSHIDI, "Controls, Large- Scale Systems," (Academic Press), *Encyclopedia* of Science and Technology, San Diego, CA, 3<sup>rd</sup>, Edition, 2002, pp. 675-686.
- 134. A. El-Osery\*, J. Burge\*, M. JAMSHIDI, A. Saha\*\*, M. Fathi and M. Akbarzadeh-T.\*, "V-Lab – A Distributed Simulation and Modeling Environment for Robotic Agents – Control Through Stochastic Learning Automata," *IEEE Transactions on Systems, Man* <u>and Cybernetics</u>, Vol.32, No. 6, pp. 791-803, 2002.
- 135. P. De Rego\*\* and M. JAMSHIDI, "Evolutionary Algorithm Design method to Optimize Spacecraft Formation for a Single Pass Interferometric Radar Observation," submitted to *International Journal on Computers in Industry*, 2002.
- 136. M. de Oliveira\* and M. JAMSHIDI, "Modeling and Control of Robot Manipulators," Book Review *IFAC Journal Automatica*, Vol. 37, pp. 1681-1682.
- 137. A. Martinez\*\*, A. W. Doerry, M. JAMSHIDI and D. Bickel, "Coherent Data Alignment and Baseline Calibration for Improved Two-Pass Interferometric SAR," accepted, *SPIE Optical Engineering Journal*, 2004
- 138. M. JAMSHIDI, S. Sheikh-Bahaei\*, J. Kitzinger\*, P. Sridhar\*, S. Beatty\*, S. Xia\*, Y. Wang\*, U. Dole, J. Liu\*, T. Song, E. Tunstel\*\*, Jr, M. Akbarzadeh\*, A. El-Osery\*, M. Fathi, X. Hu, and B. P. Zeigler, "V-Lab® - Distributed Intelligent Discrete-Event Environment for Autonomous Agents Simulation", *Intelligent Automation and Soft Computing – AutoSoft Journal*, Vol. 9, No. 3, pp.181-214, 2003.
- 139. M. JAMSHIDI, S. Sheikh-Bahaei\*, J. Kitzinger\*, P. Sridhar\*, S. Beatty\*, S. Xia\*, Y. Wang\*, U. Dole, J. Liu\*, T. Song, E. Tunstel\*\*, Jr, M. Akbarzadeh\*, A. El-Osery\*, and M. Fathi, "V-Lab® - Distributed Intelligent Discrete-Event Environment for Autonomous Agents Simulation", <u>Simulation International Magazine</u>, 2003.
- 140. S. Sheikh-Bahaei\*, J. Liu\*, M. JAMSHIDI and P. Lino, "An Intelligent Discrete Event Approach to Modeling, Simulation and Control of Autonomous Agents," *Intelligent Automation and Soft Computing – AutoSoft Journal*, Vol. 10, No. 4, pp. 337-348, 2004.
- 141. T. Song\*, C. Gasparovi, X. -M. Huang, R. R. Lee, M. Pattichis, and M. Jamshidi, "A Hybrid Tissue Segmentation Approach in Brain MRI Images," *IEEE Transactions on Medical Imaging*, 2003.

- 142. M. JAMSHIDI, S. Sheikh-Bahaei, J. Kitzinger, P. Sridhar, S. Xia, Y. Wang, J. Liu, E. Tunstel, Jr., M. Akbarzadeh, A. El-Osery, M. Fathi, X. Hu, B. P. Zeigler," A distributed intelligent discrete-event environment for autonomous agents simulation," *Applied system simulation, Kluwer Academic Publishers, January 2003.*
- 143. J. Liu\*, M. Jamshidi and S. Pourbabak, "An Intelligent Modeling Approach to cardiac Output," *Medical Journal of Cardiology*; 2004.
- 144. T. Song\*, M. M. JAMSHIDI, R. R. Lee, Mingxiong Huang: A Modified Probabilistic Neural Network for Partial Volume Segmentation in Brain MR Image. <u>IEEE</u> Transactions on Neural Networks 18(5): 1424-1432 (2007)
- 145. Y. Wang\* and M. JAMSHIDI, "A Hierarchical Fuzzy Classification Scheme for Remote Sensing Data," *Intelligent Automation and Soft Computing*, Vol. 13, No. 4, pp. 431-451, 2007.
- 146. J. K. Liu\*, M. JAMSHIDI and S. Pourbabak, "A hybrid approach on identification of cardiovascular dynamics," *IC-MED Journal ,Issue 1, No. 1,* 2007, pp. 49-60.
- 147. T. Song\*, M. Huang, R. R. Lee, and M. JAMSHIDI, 'A Data-Adaptive Fuzzy Rule Base System for Putamen Segmentation in Brain MR Images," *Intelligent Automation and Soft Computing*, Vol. 12, No. 4, pp. 431-451, 2006.
- T. Song\*, J.Y. Liu, and M. JAMSHIDI, "Fuzzy Logic and Application in Biomedical Image and Signal Processing," Chapter in *Intelligent Techniques in Medicine*, M. Pattichis, ed., Kluwer Publishing Co., Amsterdam, the Netherlands, 2007.
- 149. K. Hipel, M. JAMSHIDI, J. M. Tien and C. C. White, "The Future of Systems, Man and Cybernetics: Application Domains and Research Methods," *IEEE Transactions on* <u>SMC, Part C</u>, Volume 37, No. 5, September 2007, pp. 726-743.

150. P. Sridhar, A. M. Madni, M. JAMSHIDI, "Hierarchical Aggregation and Intelligent Monitoring and Control in Fault-Tolerant Wireless Sensor Networks," *IEEE Systems Journal*, Volume1, No. 1, September, 2007, pp. 38-54.

151. D. De Laurentis, C. Dickerson, M. Di Mario, P. Gartz, M. Jamshidi, S. Nahavandi, A. P. Sage, E. Sloane, D. Walker, "A Case for an International Consortium on System of Systems Engineering," *IEEE Systems Journa*l, Volume 1, No. 1, September 2007, pp. 68-73. 152. P. Sridhar, A. M. Madni, M. Jamshidi, "Multi-Criteria Decision Making and Behavior Assignment in Sensor Networks," *IEEE Instrumentation and Measurement Magazine*, Volume 11, No.1, February 2008, pp. 24-29.

153. A. K. Ray\*, L. Behera and M. Jamshidi, "Sonar-based Rover Navigation for Single or Multiple Platforms: Forward Safe Path and Target Switching Approach," *IEEE Systems Journal*., Vol. 2, No. 2, 2008 (cover article), pp. 258-272.

154. M. JAMSHIDI, "SYSTEM OF SYSTEMS ENGINEERING – New Challenges for 21<sup>st</sup> Century," *IEEE Systems Magazine*, Vol. 23, No. 5, May 2008, pp.2-19.

155. M. JAMSHIDI, "Introduction to System of systems engineering," Chapter 1, in <u>System of Systems Engineering – Innovations for the 21<sup>st</sup> Century</u>, (M. Jamshidi, ed.), Wiley & Sons, New York, pp. 1-18, 2009.

156. S. Mittal, B. P. Zeigler, J. L. R. Martin, F. Sahin and M. JAMSHIDI, "Modeling and Simulation of System of Systems Engineering," Chapter 5, in <u>System of Systems Engineering –</u> <u>Innovations for the 21<sup>st</sup> Century</u>, (M. Jamshidi, ed.), Wiley & Sons, New York, pp. 101-149, 2009.

157. P. Sridhar\*, A. M. Madni, and M. JAMSHIDI, "Advances in Wireless Sensor Networks: A Case Study in System of Systems Perspective," Chapter 12, in <u>System of Systems</u>

<u>Engineering – Innovations for the 21<sup>st</sup> Century</u>, (M. Jamshidi, ed.), Wiley & Sons, New York, pp. 275-292, 2009.

- 158. M. JAMSHIDI, "Introduction to System of systems engineering," Chapter 1, in <u>System of Systems Engineering – Principles and Applications</u>, (M. Jamshidi, ed.), CRC – Taylor & Francis Publishers, Boca Raton, FL, USA, pp. 1-36, 2008.
- 159. F. Sahin, M. JAMSHIDI, and P. Sridhar\*, "A System of Systems simulation framework and its applications," Chapter 4, in <u>System of Systems Engineering – Principles</u> <u>and Applications</u>, (M. Jamshidi, ed.), CRC – Taylor & Francis Publishers, Boca Raton, FL, USA, pp. 107-132, 2008.
- 160. F. Sahin, B. Horan\*, S. Nahavandi, V. Raghavan\*, and M. JAMSHIDI, "System of autonomous rovers and their applications," Chapter 14, in <u>System of Systems Engineering</u> <u>– Principles and Applications</u>, (M. Jamshidi, ed.), CRC – Taylor & Francis Publishers, Boca Raton, FL, USA, pp. 366-384, 2008.

161. M. A. Joordens\* and M. Jamshidi, "Consensus Control for a System of Underwater Swarm Robots," *IEEE Systems Journal*, Vol. 3, No.4, pp. 65-73, 2010.

162. A. Kumar Ray\*, P. Benavidez\*\*, L. Behera, and M. JAMSHIDI, "Motion Coordination for a Formation of Rovers," *IEEE Systems Journal*, Vol. 3, No.3, pp. 381-393, 2009.

M. JAMSHIDI, "Twenty years of editorship of Elsevier CEE Journal," Editorial, International Journal of Computers in Electrical Engineering – CEE, Vol. 34, 2009, pp. iii-iv.
M. JAMSHIDI, "Control Paradigms for System of Manufacturing Systems," <u>Proc.</u> <u>IEEE ININ</u>, Cardiff, UK, 2010., pp. 1123-1133.

165. M. A. Joordens\* and M. JAMSHIDI, "Design of a Prototype Underwater Research Platform for Swarm Robotics," <u>AutoSoft Journal</u>, Vol. 17, No.2, 2010, pp. 111-132. 166. J. Gomez\*\* and M. JAMSHIDI, "Fuzzy Adaptive Control for a UAV," <u>Journal of</u> Intelligent and Robotic Systems, Vol. 62, No. 2, pp. 271-293., 2011.

167. A. Panchul\*, D. Akopian, and M. JAMSHIDI," Time-Space Optimizing Fuzzy Logic Algorithm for Dynamic Load Balancing in Distributed Three-Dimensional Graphics Engine, *"International Journal of System of Systems,* Vol. 2, No. 4, pp. 309-320, 2011.

- 168. M. JAMSHIDI, J. Gomez\* and A. Jaimes\*, "Intelligent Control of UAVs for Consensus-based and Networked Control Applications," in Special Issue on "Fuzzy Set Theory and its Applications" of the <u>International Journal of Applied and Computational</u> <u>Mathematics of Applied and Computational Mathematics</u>, Vol. 10, No.1, 2011, pp. 35-64.
- 169. M. JAMSHIDI, A. Jaimes and J. Gomez\*\*, "Cyber-physical control of unmanned aerial vehicles,"*Iranica Scientia*, in Special Issue on 6-Decases of Contributions of Professor Lotfi A. Zadeh to science, engineering, Technology and Academic Leadership," Vol. 45, 2011.
- M. JAMSHIDI, Guest Editor," *Iranica Scientia*, Vol. 18, No. 3-D1, pp. 520-521, 2011 SPECIAL ISSUE on 6-Decases of Contributions of Professor Lotfi A. Zadeh to Science, Engineering, TechnologFshay and Academic Leadership", Elsevier, Amsterdam, the Netherland, 2011.

- "Guest Editorial," *Iranica Scientia*, Vol. 45, 2011 (in Special Issue on 6-Decases of Contributions of Professor Lotfi A. Zadeh to science, engineering, Technology and Academic Leadership", Vol. 18, no. 3-D1, pp. 663-668, 2011.
- 172. M. JAMSHIDI, "From Large-Scale Systems to Cyber-Physical Systems," *Journal* <u>of Internet Technology</u>, Vol. 12, No.3, pp. 367-374, 2011.
- 173. R. Jia\*, C.-J. Qian, and M. JAMSHIDI, "Semi-globalfinite-time stabilization via output feedback of planar non-linear systems with application to MPPT in photovoltaic systems," *Int. J. Automation and Control*, vol. 6, No. 2, pp. 140-156, 2012.
- 174. K. Nagothu\*, B. Kelley, M. JAMSHIDI and A. Rajaee\*, "Persistent Net-AMI for Microgrid Infrastructure Using Cognitive Radio on Cloud Data Centers," *IEEE Systems Journal*, Vol. 6, No. 1, 2012, pp. 4-15.
- 175. A, Jevitc\*, A' lvaro Gutie'rrez, D. Andina and M. JAMSHIDI, ""Distributed Bees Algorithm for Task Allocation in Swarm of Robots", *IEEE Systems Journal*, Vo. 6, No.2, 2012, pp. 296-304.
- T. Shaynefelt\*, M. JAMSHIDI, and S. Agaian, "A vision feedback robotic docking crane system with application to vanilla pollination, "*Int. J. Automation and Control*, vol. 7, No. 1/2, pp. 62-82, 2013.
- 177. Y. Manjili\*, R. Vega and M. JAMSHIDI, "Cost-Efficient Environmentally-Friendly Control of Micro-grids using Intelligent Decision-Making for Storage Energy Management," Intelligent Automation and Soft Computing, Vol. 19, No. 4, pp.649-670, 2013.
- 178. M. Gupta, L. Behera, K. S. Venkatesh and M. JAMSHIDI, "A Robust Visual Human Detection Approach with UKF Based Motion Tracking for a Mobile Robot," Submitted to *IEEE Systems Journal*, 2013
- 179. R. R. Nair, L. Behera, V. Kumar and M. JAMSHIDI, "Multi-satellite formation control for remote sensing applications using artificial potential field and adaptive fuzzy sliding mode control," Submitted to *IEEE Systems Journal*, 2013
- J.. Prevost, K. Manooj, M. JAMSHIDI, and B. Kelley, "Energy Aware Load Prediction for Cloud Data Centers," Accepted to appear in *IEEE Systems Journal*, September, 2013
- 181. A. Kumar Ray, L. Behera, and M. JAMSHIDI," Controller for a Coordinated Platoon of a Group of Mobile Robots," Submitted to *IEEE Systems Journal*, 2013
- 182. M. JAMSHIDI and Y Manjili, "Environmentally-Friendly Control of Micro-Grids Using Fuzzy Control for Storage Management," Chapter 4, Springer-Verlag, (R. Yager and S. Shahbazova, eds.), 2013
- 183. D. Shahgoshtasbi and M. JAMSHIDI, "A new intelligent Neuro-Fuzzy paradigm for Energy Efficient Homes," *IEEE Systems Journal*, Vol. 8, No.2, 2014, pp. 664-673.

- 184.B. Tannahill and M. JAMSHIDI, "System of Systems and Big Data Analytics Bridging the Gap," <u>International Journal on Computers for Electrical Engineering</u>, Elsevier, Vol. 40, pp. 2-15, 2014.
- 185.S. Chang, K. Nagothu, B. Kelley, and M. JAMSHIDI, "A Beam Forming Approach to Smart Grid Systems Based on Cloud Cognitive Radio," *IEEE Systems Journal*, Vol. 8, No.2, 2014, pp. 664-673.
- 186.S. Bakhtiari, S. Agaian, and M. JAMSHIDI," A Novel Method for Orientation Estimation in Highly Corrupted Fingerprint Images," <u>Int. Journal of Intelligent Computing for</u> <u>Medical Sciences and Image Processing</u>, Vol;. 7, pp. x-y, 2014
- 187.E. M. Bonab, M. L. Lindsey, M. JAMSHIDI, and Y.-F. Jin, "Application of graph Theory

in Network Analysis for Biological Processes," Int. Journal of Intelligent Computing for

Medical Sciences and Image Processing, Vol;. 7, pp. x-y, 2014.

- 188.P. Benevidez, J. Lambert, A. Jaimes and M. JAMSHIDI, "Landing of an ArDrone 2.0 Quadcopter on a Mobile Base using Fuzzy Logic," *Int. Journal of Complex Systems*, Vol. 1, No. 1, 2013, pp. 1-25.
- 189.J. Arumugam, S. Jeevanandham and M. JAMSHIDI, "Damping of inter-area oscillations in multimachine systems," *Int. J. Automation and Control*, Vol. 8, No. 1, 2014, pp. 32-57.
- 190.A. M. Mayers, P. J. Benavidez, G. V. S. Raju, David Akopian, and M. M. JAMSHIDI, "Closed Loop Transmission Power Control Using Third Order Quadratic Approximator", A. M. Mayer, P. Benavidez, D. Akopian, GVS Raju, and M. JAMSHIDI," IEEE Systems Journal, Vol 21, No. 1, pp. 125-132, 2014
- 191.M. JAMSHIDI, B. Tannahill, M. Ezell, Y. Yetis and H. Kaplan,
  "Applications of data analytic tools for big data management," Chapter xx, <u>*Title to come*</u>, Springer-Verlag, Germany, 2015
- 192.M. JAMSHIDI, B. Tannahill, Y. Yetis and H. Kaplan, "Big Data Analytics via Soft Computing," Chapter 12, <u>*Title to come*</u>, Springer-Verlag, Germany, 2015
  - 193.M. JAMSHIDI, B. Tannahill and A. Moussavi, "Big Data Analytic Paradigms: From Principle Component Analysis to Deep Learning," Chapter, Trends in Artificial Intelligence, Springer-Verlag, Germany, 2015.
- 194.M. Jamshidi, "Big Data Analytic Paradigms From Principle Component Analysis to Deep Learning," *IEEE SMC Magazine*, 2015 (to appear).
- 195.J. Jeff Prevost, K. M. Naghuto, M. JAMSHIDI, and B. Kelley, "Energy Aware Load Prediction for Cloud Data Centers," chapter in in "<u>Control and Systems Engineering – A</u> <u>report on four decades of contributions</u>," A. El-Osery and J. Prevost (eds.) Volume 18, Systems, Decision s and Control Series, Janusz Kacprzyk, Editor, Springer 2015.-Verlag, Wiesbaden, Germany, 2015, ISBN 978-3-319-14636-2.

196.M. JAMSHIDI, "Reflection on Four Decades of Contributions of my Graduate Students," Chapter 1 in in "<u>Control and Systems Engineering – A report on four decades of</u> <u>contributions</u>," A. El-Osery and J. Prevost (eds.) Volume 18, Systems, Decision s and Control Series, Janusz Kacprzyk, Editor, Springer 2015.-Verlag, Wiesbaden, Germany, 2015, ISBN 978-3-319-14636-2.

Year	Achievement	Comments
1962	High School Diploma, Hadaf No. 1 Campus	Tehran, Iran
1963	English Language Proficiency, Queens College	New York, NY
1967	BS EE degree from Oregon State University	Cum Laude, full 4-years scholarship
1969	MS from the University of Illinois, utilizing multi-time scale nature of hybrid physical nature of many systems, proposed a new approach to nonlinear control of nonlinear systems via parameter sensitivity.	Cum Laude, Research assistantship. Examples of such systems were all electro-mechanical systems, from a DC motor to steel mills, to radars, to robots, etc.
1971	PhD from the University of Illinois, he built upon his MS work to provide a new approach to modeling, model reduction and control and optimization of nonlinear systems with very high dimensions. By 1978, his work reached a degree of maturity, being called "large-scale systems" (LSS) within systems and controls communities.	Cum Laude, Fellowship, research assistantships.
1973	He extended most of his design techniques to time-delay systems	Results were published in <i>Int. Journal</i> of Control (UK) and Proc IEE (UK)
1975	<i>Proc. IEE Journal</i> (UK) published his main results based on doctoral work.	Foundation of design approach to large-scale systems
1975- 77	As an IBM World Trade Fellow, at the IBM Corporate Research Center in NY, he extended the LSS theory to environmental systems – water resources, air quality and electric power generation	The approach for environmental- economic power dispatch is now a division for research at the Electric Power Research Institute (EPRI)
1976	Information and Control Journal (USA) published his results based on masters work in	This was one of the earliest works on design of nonlinear systems via

## A CHRONOLOGICAL LIST OF MO JAMSHIDI'S CAREER - 1967-2015

	nonlinear control	parameter embedding approach.
1975- 79	Needing to solve very large-scale optimal control problems, he developed computational algorithms to solve algebraic and differential matrix Riccati equations.	In 1980, he published a very detailed journal paper on solutions of matrix Riccati and Lyapunov equations, referring to over 300 references.
1980	He established the, as its founding editor-in- chief, <u>IEEE Control Systems Magazine</u> now one of the strongest magazines in the IEEE family.	IEEE CSM is now one of the most popular of all IEEE magazines
1980- 84	Member, IEEE Control Systems Society Executive Committee and Board of Governors As founding	Editor-in-Chief, <u>IEEE Control</u> Systems Magazine.
1983	He published his book, <u>Large-Scale Systems –</u> <u>Modeling and Control</u> (North Holland, NY), cementing all of his contributions and many others up to that date. The book received an overwhelming success, being reviewed by many and was reportedly adopted in 55 countries.	This book turned out to be the <u>first text</u> in the area and was subsequently translated into Chinese, Russian, French, Romanian, among others.
1984- prese nt	He extended the theory and techniques of large- scale systems to other electro-mechanical systems, <i>robots</i> , including open-chain robots, mobile robots and Stewart platforms.	He has published over 24 volumes in the general areas of robotics and manufacturing
1983- 84	At IBM Boulder, he developed large-scale systems stability and control approaches for pint head electronics of then IBM Copiers line of products.	His techniques provided stability analysis of such systems
1984	He received the IEEE Centennial Medal from the Control Systems Society. A summer at GM Technology Center (Warren, MI), he developed large-scale systems approach model and design techniques for a future GM engine, which turned out to be the "Saturn"	engine later on. He co-edited an IEEE Centennial issue of the <u>IEEE</u> <u>CSM</u> with late Nat Nichols and George Axelby.
1984- 1990	At US Air Force weapons laboratory, he extended his large-scale systems approaches to electro-optic systems for phased array telescopes and multi-mirror space systems.	A USAF patent resulted for adaptive optics. Some of his techniques were considered in the operational phases of the Hubble telescope.
1985	He was elected as a "Distinguished member" of the IEEE Control Systems Society.	

1986	He published two of the first books (one text and one edited) on computer-aided control systems design utilizing algorithms to model, optimize and design large and small-scale systems.	These books were translated into Chinese and Russian. Russian edition sold 20,000 copies in former Soviet Union.
1986- 1992	He served as the editor for ASME Press series on robotic and manufacturing systems	10 volumes were printed in this series.
1986- prese nt	Honorary Chaired Professor, Nanjing Aeronautical University Nanjing, P. R. China Honorary Chaired Professor, Xia'n Institute of Technology Xia'n. P. R. China	Honorary Chaired Professor, East China Industrial Institute, Nanjing, P. R. China
1987	He co-authored a book covering all his extensions of large-scale systems to time-delay systems in a research monograph by Elsevier publishers, as one of the most readable books on the subject.	This book was considered the most readable one in the field.
1987- 88	Spent a sabbatical leave at George Washington University as well as consulting work at National Institute of Standards and Technology (NIST).	He was also a visiting professor at the University of Virginia – Charlottesville for Spring 1988.
1988	He was selected as the AT&T Professor of Manufacturing for his key role in establishing the UNM's manufacturing engineering's graduate program. Now a multi-million dollar research and education center.	UNM's Manufacturing Engineering Program is now a multi-million dollar per year research and educational endeavor.
1988- 92	He was hired as an advisor to Oak Ridge National Laboratories breeder reactor control program.	He applied many large-scale systems approaches in modeling and design for these reactors.
1988- 1996	He served as the editor for Prentice Hall book series on environmental manufacturing systems	12 volumes were printed in this series.
1989	He was elected as an IEEE Fellow.	For "contributions to theory and applications of large-scale systems"
1993	He won the top engineering researcher award of the University of New Mexico.	
1993- 1997	He was one of the 10 US professors acting as advisors to the NASA JPL's Pathfinder Mars mission.	Mission landed on Mars on July 4 <sup>th</sup> , 1997.

1994	He established the World Automation Congress (WAC), now as a premier technical meeting held every 2 years around the world, covering robotics, manufacturing, controls, automation, artificial intelligence, multi-media, image processing, biomedical engineering and financial engineering.	As WAC's official journal, <u>International Journal on Intelligent</u> <u>Automation and Soft Computing</u> ( <u>AutoSoft</u> ) was established in 1994 as well. WAC has a tradition of helping 3 <sup>rd</sup> world scientists attend at very minimal fees.
1994- 95	Spent a sabbatical leave as a distinguished professor of French NSF (CNRS) at LAAS Center in Toulouse, France working on autonomous control of mobile robots and applications of AI to large-scale systems.	control of mobile robots and Second edition of Large-Scale Systems was finished and published by Prentice- Hall, Inc., in 1997
1995	He led a team of researchers as Principle Investigator and received \$ 6.4 M contract from NASA HQ to build a Center on Autonomous Control Engineering (ACE).	ACE is now a well-known center around the world. All total, ACE has received \$14 M worth of funding since its inception.
1995	He was inducted into TWAS – Third World Academy of Sciences for his contributions to "control and optimization of complex systems"	As a member of TWAS, he has donated to 3rd world science & engineering libraries with over 1000 volumes of books, journals and CD ROMs.
1995- 2004	ACE has produced over 120MS and PhD degrees from UNM, former partner ACEIT Center in North Carolina, and now at ACE Laboratory at UTSA.	Great many of these graduates are among America's ethnic minorities. ACE graduates are now professors, scientist and industry leaders all around the world.
1996	He received a US Patent (# 5,590,246) on intelligent enhancement of analog and digital images with commercial applications in photography, manufacturing inspection, internet images, etc.	For color image printing from the Internet or other sources as well as enhancing the quality of color film printing.
	The technology has produced two commercial products SmartPhotoLab <sup>©</sup> ( <u>http://ace.unm.edu/spl</u> ) and SmartPhotoCard	
1997	2 <sup>nd</sup> edition of his Large-Scale Systems book was published by Prentice Hall.	This volume was translated into French.
1998	Received one honorary doctorate degrees from Azerbaijan –	Former Soviet Republic

1999	He was elected as Fellow of the ASME	For the applications of large-scale systems to robotics and manufacturing.
1999	He was elected a fellow of the AAAS – American Academy for the Advancement of Science	For modeling, optimization and control of large-scale systems
1999	Awarded NATO Professorship lecturing on intelligent Control in Portugal.	Nominated by researchers in Portuguese Institutions.
2000	He became the Regents Professor, a title for life, at the University of New Mexico	Millennium award from IEEE CSS Society
2001	He was elected as a member of the Russian Academy of Nonlinear Systems and was invited to Moscow for the induction ceremony.	
2001	He was elected to Hungarian Academy of Engineering and was inducted into the Academy by its President Prof. Rubik.	For contributions to "computer- aided large-scale systems control"
2002	Elected into IEEE SMC Board of Governors.	From 2003-2005 he served as VP for Conferences in IEEE SMC Society.
2003	He was the lead author on a book on applications of genetic algorithms to robust control – the first book of its kind.	This book bridged a gap between robust systems and soft computing tools for design.
2003	He was chosen as an honorary professor of Deakin University,	Australia
2004	He was elected as a Fellow of the New York Academy of Science for his work on autonomous control and automation.	His 6 <sup>th</sup> fellow grade membership.
2004	Received an Honorary Degree in Engineering from the University of Waterloo, Canada.	His 2 <sup>nd</sup> honorary doctoral degrees.
1995- prese nt	He has graduated his 45th Ph.D. and 65 <sup>th</sup> MS electrical and mechanical engineering students of his own. In addition, he has supported and overseen the graduation of an additional 82 Ph.D. and MS students. Over 45% of Mo Jamshidi's MS and Ph.D. students have been members of USA's ethnic minorities. He	The VI-P® approach has been adopted by many institutions, including in many multi- institutional NSF Center proposals.

	initiated an innovative student research/teaching teaming concept, called the VI-P® Model (Vertically Integrated Projects. Currently advising 7 PhD students and 2 MS students at the University of Texas, San Antonio. <u>http://ace.unm.edu</u> , which is now a nationally recognized and adopted by numerous institutions in the United States.	
2004	Received an Honorary Degree in Engineering from the Technical University of Crete, Greece.	His 3 <sup>rd</sup> honorary doctoral degrees.
2004	He is co-authoring two US Patent disclosures – one on enhanced recognitions of MRI images and one for Remote Sensing of Satellite	Images. These disclosures are subject of commercialization with a venture capital company in Northern California
2005	Chaired the IEEE SMC Conference in Big Island of Hawaii	Over 700 attended the meeting.
2005	Received the IEEE SMC Norbert Wiener	Best Researcher Award in Oct. 2005
2005	Elected into IEEE SMC Board of Governors.	For period 2005-2008.
2006	Early retired from UNM and joined the University of Texas, San Antonio	As Lutcher Brown Endowed Chaired professor of ECE
2006	Began re-establishing the ACE Center	San Antonio, Texas.
2006	Accepted Adjunct Professor of Deakin University, Australia and visited Australia	on a lecture series in 4 cites for 3 weeks in August.
2006	He was chosen as the Founding Editor of the <u>IEEE</u>	<u>Systems Journal</u> of the IEEE Systems Council.
2006	Chaired the IEEE SMC Conference on System of systems in Los Angeles	Over 85 attended the meeting, 51 were from industry and Government.
2006	Received the IEEE SMC Outstanding Contribution Award	In Taipei, Taiwan
2006	Awarded Distinguished Alumni in Engineering at Oregon State University ( <u>http://engr.oregonstate.edu/oregonstater/2006/Moha</u> <u>mmadJamshidi.html</u> )	Honor received in March 2007.

2007	Elected to rank of Associate Fellow of AIAA	
2007	Chaired the IEEE SMC Conference on System of systems in San Antonio	Over 200 attended the meeting, 110 were from industry and Government.
2007	ACE Laboratory's system of rovers to alarm start of a fire. <u>http://stateoftomorrow.com/series/science-and-</u> <u>tech/high-tech-warriors.htm</u>	Shown on all Public TV stations in Texas
2008	Chaired the 2008 IEEE SMC Conference on System of systems in Monterey, CA	Over 100 attended the meeting, 85 were from industry and Government.
2008	Distinguished Professor of Systems Engineering, Universidad Polytechnic de Madrid (UPM), Madrid, Spain	Lectures on system of systems engineering
2008	He published by Wiley (© 2009) in New York (and Canada) and second one by Taylor & Francis CRC (© 2008) in Boca Raton, FL and London.	These are the first books on System of Systems Engineering in the world.
2008	Chaired the WAC 2008 Congress in Waikoloa, HI, USA	Over 150 from 30 nations attended.
2009	Nominated and received a fellowship from UK Royal Academy of Engineering, Lecturing on System of Systems Engineering, throughout UK and Northern Ireland.	Nominated by researchers in British Institutions.
2009	Review Board Member, US-Vietnam Education Foundation	Annual visit to Vietnam and Lecture
2009	Member, Department of Defense SoSE National Committee	Help set policy on SoSE for national security
2009	Chaired the 2009 IEEE Conference on System of Systems in Albuquerque, NM	Over 50 attended the meeting.
2009- 2010	Distinguished Fellow, UK Royal Academy of Engineering, Cardiff University, Wales, UK	Tutorials on SoSE and Keynote speeches at 5 UK Institutions
2009	Invited Board Member for Dean Leah Jamieson (Purdue University)	Engineering College's Strategic Plan for SoS Institute

2009- 2012	Honorary Professor, Deakin University, Geelong, VIC, Australia	Joint research work and co-advising doctoral students
2009	http://www.sebokwiki.org/wiki/System_of_Syst ems_Engineering_%E2%80%93_New_Challeng es_for_the_21st_Century	
2010	Lead for US Network for Complex Systems Engineering	Conducted Network's first workshop at George Mason University, Fairfax, VA.
2010	Best Paper Award (1 <sup>st</sup> Place) IEEE Systems Conference, San Diego, CA, April 2010	Among 140 presented papers
2010	Co-Led for US Network for US Armed Forces in Complex Systems Engineering, August 16- 17, 2010	Conducted at US Air Force Institute of Technology, Dayton, OH
2010	Two Best Paper Awards (1 <sup>st</sup> and 2 <sup>nd</sup> Place) World Automation Congress, Kobe, Japan, September, 2010	Among 140 presented papers
2011	Lead, Sustainable Energy Research Group	Including 6 Faculty and 15 graduate students
2011	Lecture series at University of Macao and National University of Aeronautics and Astronautics, Nanjing, China	Sponsored by NUAA
2011	Co-Lead for Texas Center for Human Rehabilitation, encompassing the entire State of Texas.	Co-chair, Workshop, Aug 19, 2011, Houston
2011	Lecture on cyber physical (System of) Systems at US Patent Office, Washington, DC on October 31, 2011 reaching over 3000+ patent examiners live and webcast. <u>http://utsa.edu/today/2011/12/jamshidiresearch.h</u> <u>tml</u>	Sponsored by Iranian-American Society of Patent Lawyers
2011	Council member of University of Texas System's Chancellor	On October 31, 2011

2012	Honorary Professor, University of Birmingham, UK.	2011-present
2012	Presidential Award for Advancing Globalization of Institution, UTSA	President Ricardo Romo
2012	Honorary Professor, Obuda University, Budapest, Hungary.	2012-present
2013	Board member, Japanese Ministry of Education, Sport and Culture of the Osaka University Immunology Frontier Research Center	2013-present
2013	Member, UTSA selection committee for the Presidential Globalization Advancement Award	2013
2013	Featured in a Rackspace –the Open Cloud Company Blog See <u>http://www.rackspace.com/blog/how-</u> <u>the-open-cloud-powers-academic-and-</u> <u>scientific-research/</u>	March 19, 2013 UTSA Campus
2013	Received Best Contribution Award from IEEE Systems Council	April 17, 2013 Orlando, FL
2013	Designated as Rackspace Open Cloud Ambassador	Rackspace Company, San Antonio, TX
2013	Winner Best Paper Award, IEEE SoSE 2013	June 3, 2013 Maui, HI, USA
2013	Chair, International Advisory Committee, LABEX Project <u>http://www.utc.fr/labexms2t/workshop</u> <u>ms2t2013/programme.html</u>	Technical University of Compiegne, France
2013	Chairman, 3 <sup>rd</sup> Annual World Conference on Soft Computing <u>Wacong.org/2013wcsc</u> and <u>http://utsa.edu/today/2013/12/zadeh.html</u>	San Antonio, TX December 16-18, 2013
2013	Member of Technical Advisory Board, Z Advanced Computing	Potomac, MD, USA
2013	Board Member, Academic Networking	San Antonio, TX, USA

	and Services, LLC	
2014	Member, IEEE Fellow Committee (2014-2015)	New York, NY, USA
2014	Advisor on World Universities Ranking	Quacquarelli Symonds (QS) Ltd, UK
2014	Winner IEEE USA Career Award for Professional Contributions to Systems Engineering	New York, NY http://engineering2.utsa.edu/index.php/unca tegorized/jamshidi-recieves-a-2013-ieee- usa-award/
2014	Invited Member of International Advisory Board of European Cyber- Physical Systems network SOCIALCPS, March 2014	Spain
2014	Visiting Professor of System of Systems Engineering	Loughbrough University Loughbrough, England
2014	College of Engineering Best Researcher Award	University of Texas at San Antonio April 29, 2014
2014	Panel member IEEE SMC Norbert Weiner Panel Session <u>http://smc2014.org/node/108</u>	San Diego, CA Oct 6, 2014
2014	Honoree of WAC 2014 Winner WAC Medal of Honor for outstanding contributions to systems engineering and ethnic American education	Wacong.org August 5, 2014
2015	Invited Judge, UAE AI & Robotics for Good Award". Sponsored by University of Dubai.	For more details, please visit the website: <u>http://www.roboticsforg</u> <u>ood.ae/</u>