CURRICULUM VITAE

MANSOUR RAHIMI

ADDRESS

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EDUCATION

Ph.D. (1982)	Industrial and Systems Engineering (Specialization: Human Factors Engineering) Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, VA
M.S. (1978)	Industrial Engineering, West Virginia University, Morgantown, WV
B.S. (1977)	Industrial Engineering, West Virginia University, Morgantown, WV

TEACHING

2014-present: Associate Professor of Spatial Science Institute, University of Southern California.

1997-present: Associate Professor, Epstein Department of Industrial and Systems Engineering, University of Southern California.
Courses:
Introduction to Industrial and Systems Engineering
Senior Design Project
Engineering Project Management
Work/Technology/Organization
Human-Computer Interaction
Human Factors in Engineering
Industrial Ecology: Technology-Environment Interaction (a student team in this course won the USC Fleischer Award in Green Technologies)

1989-1997: Associate Professor of Safety and Ergonomics/Human Factors, Institute of Safety and Systems Management, University of Southern California.
Administrative: Faculty Coordinator for BS and MS in Safety; Faculty Coordinator for ABET Accreditation; Program Director for Occupational Safety and Hazardous Waste Management (National Institute for Safety and Health - Southern California Educational Resource Center).
Courses: Safety Engineering and Technology, Human Factors in Accident Causation, System Safety, Statistical Methods for Safety, Statistics and Data Analysis, Introduction to Safety Health and Environmental Management, Ergonomics and Information Processing, Senior Internship Project.

1985–1989: Assistant Professor, Department of Safety Science, ISSM, University of Southern California.

1982–1985: Assistant Professor, Department of Industrial Engineering, Wichita State University, Wichita, Kansas. *Courses:* Introduction to IE, Human Factors Engineering, Safety Engineering, Advanced Techniques in Safety Engineering, Work Physiology, Senior Project in IE.

RESEARCH INTERESTS

- Industrial Ecology, Life-Cycle Assessment, Design For Environment

- Environment/Safety/Human Factors
- Human-Computer Interaction

Research Projects

2015: Senior Investigator (PIs: Massoud Pedram and Sandeep Gupta)
"SHF: Small: Technology Development and Design Optimization of Hybrid Electrical Energy Storage Systems"
Budget: $449,997 (Rahimi's share: 0.5 summer month)
Project period: 7/1/12 –12/31/15

2014: Senior Investigator (PIs: Massoud Pedram and Sandeep Gupta)
"SHF: Small: Technology Development and Design Optimization of Hybrid Electrical Energy Storage Systems"
Budget: $449,997 (Rahimi's share: 0.5 summer month)
Project period: 7/1/12 –12/31/15

2013: Senior Investigator (PI: Massoud Pedram)
"NSF SHF: Small:Variability-Aware System-Level Power Management in Multi-Processor Systems (53-4503-5580)"
National Science Foundation, Software/Hardware Foundations
Budget: $400,000 (Rahimi's share: one summer month)
Date: 09/01/2010 to 08/31/2013

2012: Faculty Affiliate (PIs: Najmedin Meshkati, Alex Capron)
"USC Health Systems Improvement Collaborative"
USC Research Collaboration Fund
Budget: $30,000

2012: Faculty Affiliate (PIs: Paul Adler, Jim Haw, Roger Ghanem)
"An interdisciplinary faculty colloquium on Environmental Sustainability and the Global Economy"
USC Research Collaboration Fund
Budget: $30,000

2009-2010: CoPI (with Ardavan Asef-Vaziri as PI and Dan Middleton as CoPI)
"Operational, Safety, Environmental, and Financial (OSEF) Feasibility Analysis of Integrating Exclusive Truck Roads into SR60 Freight Corridor "
Leonard Transportation Center, CSU San Bernardino
Budget: $49,999

2009-2010: CoPI (with Joshua Newell as PI)
"Moving Containers Efficiently with Less Impact: Dynamic Modeling and Decision-Support Architecture for Clean Port Technologies"
Metropolitan Transportation Research Center, USC/CSULB
Budget: $89,341

2008-2009: PI (with Robert Vos)
"Social Ventures and Urban Sustainability"
Provost's fund for Undergraduate Research Associates Program, USC
Budget: $10,000

2008-2009: CoI (with R. McConnel, J. Gauderman, J. Wilson, J. Wolch, A. Curtis, M. Bernstein, S. Fruin, M. Pastor)
"Impact of Vehicle Pollution on Children's Health in Southern California: Methods Development for a Spatially Based Assessment of Burden of Disease, Economic and Policy Consequences"
Zumberge Fund, USC

Budget: $50,000

2008-2009: PI
"A Comparative Study of Environmental Life-Cycle Impacts for Two Construction Technologies: Automated Contour Crafting versus Manual Concrete Masonry Unit"
USC's Center for Rapid Automated Fabrication Technologies
Budget: $7,000

2006-2007: PI (with Ardavan Asef-Vaziri and Robert Harrison (U. Texas))
"Integrating Inland Ports into the Intermodal Goods Movement System for Ports of Los Angeles and Long Beach"
Metrans, USC/CSULB/CalTrans
Budget: $90,000

2006-2007: PI (with Robert Vos and Hilary Bradbury-Huang (LAS))
"Building USC Research Capacity for Environmental Life-Cycle Assessment of Future Fuels and Energy Systems"
Provost's Future Fuels and Energy Initiative, USC
Budget: $25,000

2005-2006: CoPI (with N. Meshkati and J. Torabzadeh (CSULB))
"Study of the Exposition Light-Rail Safety for Pedestrians and Drivers"
Metrans, USC/CSULB/CalTrans
Budget: $129,000

2005: CoPI (with Kenneth Atkins (JPL), I. Maya, and N. Meshkati)
"Development of a Practical Lessons Learned Tool for Project Management/Risk Assessment of Future JPL Projects"
Jet Propulsion Laboratory
Budget: $25,000

2004-2005: PI (with M. Dessouky, M. Sahimi, and R. Vos (LAS))
Supplement funding to "Modeling Eco-Industrial Symbiosis: Greening of Regional Industrial Materials Networks"
National Science Foundation
Budget: $12,188

2004: Co-PI (with Isaac Maya and N. Meshkati)
"Cultural Influences on the Implementation of the Lessons Learned in Safety and Risk Management Decisions"
NASA Center for Program/Project Management Research, University Space Research Association
Budget: $75,000

2003-2004: Co-PI (with Behrokh Khoshnevis)
"Construction by Contour Crafting: A New Paradigm in Building Houses"
USC Urban Initiative, Public Policy Briefing
Budget: $10,000

2002-2003: USC Urban Fellow (with R. Vos and B. Yenice-Ay (Post Doc, ISE))
"Modeling the Los Angeles Industrial Ecosystem"
USC Urban Initiative, Urban Deans' Council
Budget: $25,000

2002: Co-PI (with Jennifer Wolch)
"Sustainability Starts at Home"
Southern California Gas Company, Diverse Markets Outreach Program
Budget: $99,975

This was a contract assigned to the Center for Sustainable Cities, designed to develop and present curricula on urban sustainability in support of energy conservation and efficiency efforts in hard-to-reach markets in Los Angeles. Rahimi's responsibility was to develop the environmental life-cycle assessment and analysis of gas and electric power generation and delivery systems.

2002-2003: PI (with M. Sahimi, M. Dessouky, R. Vos)
"Modeling Eco-Industrial Symbiosis: Greening of Regional Industrial Materials Networks"
National Science Foundation
Budget: $110,000

2001-2002: Co-PI (with T. Banerjee, L. Mitchel and D. Bahl)
"Symposium on Sustainable Industrial Development: Energy and Material Exchange Optimization through Eco-Industrial Networks"
National Science Foundation
Budget: $40,000

2001-2002: PI (with M. Dessouky)
"A Methodology for Joint Optimization of Service and Life-Cycle Environmental Impact Assessment of Transportation Systems"
Metrans USC/CSULB/CalTrans
Budget: $49,999

2001-2002: Co-PI (with Albert Rizzo, U. Newmann, C. Shahabi, N. Meshkati)
"Design, Development and Evaluation of Virtual Environments: An Integrated Research Program to Address Human Factors Issues within the ICT Program"
Institute for Creative Technologies, USC
Budget: $200,000

2000-2001: Co-PI (with N. Meshkati and M. Driver (Marshall Business School))
"Investigating the Role of Driver Decision Styles in Highway-Rail Crossing Accidents"
Metrans USCC/CSULB/CalTrans
Budget: $88,062

2000: Fellow in Industrial Ecology
"Application of Information Technology and Real-Time Design for Environment to Intelligent Transportation Systems"
AT&T Research Foundation
Budget: $25,000

1999-2000: Co-PI (with M. Dessouky)
"A Task Decomposition Model for Dispatchers in Dynamic Scheduling of Demand Responsive Transit Systems"
Metrans USC/CSULB/CalTrans
Budget: $50,000

1999-2000: Research Coordinator
"Research Faculty Network in Design For Environment"
Grant: Zumberge Fund (through ESPE-SC), USC
Budget: $2,000

1990-1992: PI
"A Survey/Questionnaire of Disabled after Loma Prieta Earthquake"
Grant: National Science Foundation, Biological and Critical Systems
Budget: $15,692

1989-1992: PI
"Earthquake Hazards and the Disabled"
Grant: National Science Foundation, Biological and Critical Systems
Budget: $131,524

1988-1989: PI
"Methodological Assessment of Human Reliability in Robot Programming Tasks"
Grant: Faculty Research and Innovation Fund, University of Southern California
Budget: $4,000

1988-1989: Co-PI
Principal Investigator: Waldemar Karwowski (University of Louisville)
"Worker Perception of Hazardous Robotics Workstations"
Grant: National Institute for Occupational Safety and Health
Budget: $26,539

1988-1989: Co-PI
Principal Investigator: Harry Hurt (ISSM)
"Motorcycle Conspicuity and Accidents"
Research Contract: Motorcycle Safety Foundation, Inc. and Honda of America, Inc.
Budget: $135,000

1987-1988: PI
“Design of Interactive Robotics Graphics for Safety using IBM-PC"
Grant: IBM Grant Competition SOCRATES funded through the University of Southern California
Budget: IBM equipment grant, $6,000

1987-1988: Equipment Grant
"Productivity Barriers in Automated Office Environment: An Ergonomic Design Approach using SAMMIE System"
Grant: Tektronix, Inc. (CAD terminal 4115-B connected to a Prime mini-computer using SAMMIE software).
Budget: Tektronix equipment grant, $7,044

1985: PI
"Analysis of Functional Abilities of Neurologically Impaired Populations"
Grant: National Institute for Handicapped Research, funded through the Cerebral Palsy Research Foundation of Kansas and Wichita State University Rehabilitation Engineering Center.
Budget: $61,974

1984: PI
"Analysis of Functional Abilities of Neurologically Impaired Populations"
Grant: National Institute for Handicapped Research, funded through the Cerebral Palsy Research Foundation of Kansas and WSU Rehabilitation Engineering Center.
Budget: $63,635

1983: Co-PI
Principal Investigator: Dr. Don E. Malzahn (Department of IE, Wichita State University)
"Definition and Prediction of Job-Related Performance Characteristics for Persons with Neurological Impairments"
Grant: NIHR, in cooperation with CPRFK and WSU Rehabilitation Engineering Center.
Budget: $40,962

Education Projects

2013: Co-PI (with Greg Placencia)
“Project-based Support for ISE 440 (Work, Technology, and Organization) and ISE 495 (Senior Design Projects)”

Company support: ABC Entertainment
Budget: $10,000

2012: helped the EWB Board to write a grant
"Engineering Without Borders"
Boeing and Engineers Without Borders, USA
Budget: $2,500

2011: PI (with Dana Sherman as CoPI)
"Engineers Without Borders: La Estanzuela Water Project"
Daniel J. Epstein Institute, USC
Budget: $8,510

2008-2009: PI and Faculty Advisor, Engineers Without Borders (EWB-USC)
"Potable Water for Indigenous Lencas: Village of Corral de Piedras, Honduras"
Metropolitan Water District, Los Angeles
Budget: $10,000

2008-2009: PI
"Engineering in the Developing World"
Provost's Fund for Innovative Undergraduate Teaching, USC
Budget: $5,000

1999-2001: Research Faculty Advisor
"Environmental Science, Policy and Engineering - Sustainable Cities" Program
Funding from NSF/IGERT through ESPE-SC (a multi-disciplinary environmental science program at USC)
Fellowship stipend, tuition and research allowance for a PhD Student (Merrill Weidner): $50,000 (two years)

1994-1997: Program Director
"Occupational Safety and Health, Southern California Educational Resource Center"
Training Grant: National Institute for Occupational Safety and Health
Budget: $248,000

1994-1997: Program Director
"Hazardous Substance Academic Training, Southern California Educational Resource Center"
Training Grant: National Institute for Occupational Safety and Health
Budget: $180,000

1987-1988: Research Faculty
"Southern California Educational Resource Center Research Initiative"
Center Director: Dr. James O. Pierce (ISSM)
Grant: National Institute for Occupational Safety and Health
Budget: $5,175 (This fund was used for Graduate Research Assistantship)

PROPOSALS (UNFUNDED)

Title: Synergetic Co-Robot and Teleoperation Strategy for Extraterrestrial and Hostile Environment Infrastructure Development; submitted to the National Robotics Institute – National Science Foundation; CO-PI, $7 million budget, 2012.

Title: Tele-Robotics for Manufacturing; prepared for the National Manufacturing Initiative. Lead PI, Behrokh Khoshnevis, 2013

NSF Engineering Research Center for Power Awareness, Resilience, and Smart Energy for the Crowd (PARSEC). Lead PI, Masoud Pedram (Professor, Ming Hsieh EE), 2014.

NRC-HQ-13-R-04-0167, "Destinations of Released Patients Following Treatment with Iodine-131, and Optionally, Estimation of Doses to Staff at Nursing Homes Receiving Such Patients." Lead PI, Gay Goodman, Human Health Risk Research, Inc. (HHRR), total budget: $250K, 2014

Health, Technology, Engineering (HTE)@USC, developing research agenda on User Interface Design for Electronic Health Records. Attended two full-day sessions with 20 other Keck and Viterbi faculty. We have developed design targets and long-term goals for the research collaboration in this area (2013-2014).

PUBLICATION AND SCHOLARLY ACTIVITY

Refereed Articles

Rahimi, M. and Malzahn, D.E. (1984). Task design and modification based on physical ability measurement. *Human Factors,* 24(6), 715–726.

Wierwille, W.W., Rahimi, M. and Casali, J.G. (1985). Evaluation of sixteen measures of mental workload using a simulated flight task emphasizing mediational activity. *Human Factors*, *27*(5), 499–502.

Rahimi, M. (1986). System safety for robots: An energy barrier analysis. *Journal of Occupational Accidents, 8,* 109–127.

Rahimi, M. (1987). Design of automated hybrid work stations: An evaluation of robot sensory systems for safety. *International Journal of Industrial Ergonomics,* 1 , 293–303.

Rahimi, M. (1987). Human factors engineering and safety in robotics and automation. *Human Factors Bulletin*, 30(7), 3–5.

Rahimi, M., Hancock, P.A., and Majchrzak, A. (1988). On managing the human factors engineering of hybrid production systems. *IEEE Transactions on Engineering Management,* 35(4), 238–250.

Karwowski, W., Rahimi, M., and Mihaly, T. (1988). Effects of computerized automation and robotics on safety performance of a manufacturing plant. *Journal of Occupational Accidents,* 10 (3), 217-235.

Raafat, F. and Rahimi, M. (1990). Robots and advanced production systems: An analysis of safety and organizational factors. *International Journal of Management,* 7(2), 148-157.

Robertson, M. and Rahimi, M. (1990). A systems analysis for implementing video display terminals, *IEEE Transactions on Engineering Management,* 37(1), 55-61.

Wulf, G., Hancock, P.A., and Rahimi, M. (1989). Motorcycle conspicuity: An evaluation and synthesis of influential factors. *Journal of Safety Research,* 20, 153-176.

Karwowski, W. and Rahimi, M. (1989). Work design and work measurement: Implications for advanced production systems. *International Journal of Industrial Ergonomics*, 4, 185-193.

Rahimi, M. and Karwowski, W. (1990). Human perception of robot safe speed and idle time. *Behaviour and Information Technology,* 9, 13-23.

Rahimi, M. and Karwowski, W. (1990). A research paradigm in human-robot interaction. *International Journal of Industrial Ergonomics.* 5(1), 59-71.

Rahimi, M., Briggs, R.P., and Thom, D.R. (1990). A field evaluation of driver eye and head movement strategies toward environmental targets and distractors. *Applied Ergonomics*, 21(4), 267-275.

Karwowski, W., Rahimi, M., Parsaei, H., Amarnath, B.R. and Pongpatanasuegsa, N. (1991). The effect of simulated accident on worker safety behavior around industrial robots. *International Journal of Industrial Ergonomics*, 7(1), 229-241.

Karwowski, W. and Rahimi, M. (1991). Worker perception of safe speed and idle condition in simulated monitoring of two industrial robots. *Ergonomics*, 34(5), 531-546.

Hancock, P.A., Wulf, G., Fasnacht, P., and Rahimi, M. (1991). Investigations into vehicle conspicuity: Car-driver behavior during differing driving maneuvers. *Accident Analysis and Prevention*, 22(3), 274-282.

Rahimi, M. and Xia, X. (1991). A framework for software safety analysis and verification of industrial robot operations. *International Journal of Computers and Industrial Engineering,* 20(2), 279-287.

Rahimi, M. (1993). An examination of behavior and hazards faced by physically disabled people during the Loma Prieta earthquake. *Natural Disasters*, 7, 59-82.

Rahimi, M. and Azevedo, G. (1993). Building content hazards and behavior of mobility restricted residents. *United States Geological Survey Professional Paper 1553-B* (The Loma Prieta, California, Earthquake of October 17, 1989 -- Public Response).

Rahimi, M. (1994). Behavior of mobility disabled people in earthquakes: A simulation experiment. *Earthquake Spectra.* 10(2), 381-401.

Rahimi, M. (1995). Merging safety, health, and environment into total quality management. *International Journal of Industrial Ergonomics.* 16(2), 83-94.

Rahimi, M. and Dessouky, M. (2001). A hierarchical task model for dispatching in computer-assisted demand-responsive paratransit operation. *Intelligent Transportation Systems Journal*, 6, 199-223.

Rahimi, M. and Weidner, M. (2002). Integrating Design for Environment (DFE) impact matrix into Quality Function Deployment (QFD) process. *The Journal of Sustainable Product Design*, 2, 29-41.

Dessouky, M., Rahimi, M., and Weidner, M. (2003). Jointly optimizing cost, service, and environmental performance in demand-responsive transit scheduling," *Transportation Research Part D: Transport and Environment*, 8; 433-465.

Rahimi, M. and Weidner, M. (2004). Decision analysis utilizing data from multiple life-cycle impact assessment methods, Part I: A theoretical basis. *Journal of Industrial Ecology*, 8(1-2), 93- 118.

Rahimi, M. and Weidner, M. (2004). Decision analysis utilizing data from multiple life-cycle impact assessment methods, Part II: Model development. *Journal of Industrial Ecology*, 8(1-2), 93- 118.

Maya, I., Rahimi, M., Meshkati, N., Madabushi, D., Pope, K., and Shulte, M. (2005). Cultural influence on the implementation of lessons learned in project management. *Engineering Management Journal*, 17, 42-50.

Meshkati, N., Rahimi, M., and Driver, M. (2006). Investigating the role of driver decision styles in highway-crossing accidents. *Accident Reconstruction Journal*, May-June, 51-57.

Rahimi, M. and Vaughn-Cook, M. (2007). Information architecture for an Alzheimer's communication and monitoring system. *Gerontechnology*, 6 (1), 42-55.

Pourmohammadi, H., Rahimi, M. and Dessouky, M. (2008). A reverse logistics model for the distribution of waste/by-products: A joint optimization of operation and environmental costs. *Supply Chain Forum: An International Journal*. Vol. 9(1)

Asef-Vaziri, A., Khoshnevis, B., and Rahimi, M. (2008). Design and analysis of an automated container handling system in seaports. *J. Agile Systems and Management, 10(4),* 362-379. [2009 Best Paper Award, College of Business and Economics, California State University Northridge].

Rahimi, M., Asef-Vaziri, A., and Harrison, R. (2008). An inland port location-allocation model for a regional intermodal goods movement system. *Journal of Maritime Economics and Logistics*. Vol 10, No. 4, 362-379.

Madachy, R., Haas, B., Bradbury, H., Newell, J., Rahimi, M., Vos, R., and Wolch, J. (2008). Achieving sustainable development in Southern California: collaborative learning through system dynamics modeling. *18th Annual Symposium of International Council of Systems Engineering*, Netherlands, June 18.

Rahimi, M., Arhami, M., Khoshnevis, B. (2009). Crafting Technologies. *Times Journal of Construction and Design*, April, pp. 30-34.

Placencia, G., Rahimi, M. and Khoshnevis, B. (2009). Sensing directionality in tangential haptic stimulation. *Engineering Psychology and Cognitive Ergonomics*, Vol. 17, pp. 253-261.

Placencia, G., Rahimi, M., Khoshnevis, B. (2011). A heuristic to capture multi-directional lateral tactile perception. *Theoretical Issues in Ergonomics Science*. *iFirst*, 1-15.

Kim, J., Rahimi, M., Newell, J. (2011). Life-cycle emissions from port electrification: a case study of cargo handling tractors at the Port of Los Angeles. *International Journal of Sustainable Transportation*. 6(6): 321-337.

Asef-Vaziri, A., Behnejad, A., Rahimi, M., Middleton, D. (2011). A study of truck collision with focus on California SR-60. *California Journal of Operations Management*, 9(1), 71-85.

Placencia, G., Rahimi, M., Khoshnevis, B. (2012). Effects of distance and direction on tangential tactile perception: a haptic experimentation on a finger pad. *Robotica*, November 2012, 1-7.

Kim, J., Rahimi, M. (2014). Energy Load and Electrified Transportation in Los Angeles: Impacts on Greenhouse Gas Emissions. *Proceedings of the IEEE International Symposium on Sustainable Systems and Technologies* (ISSN 2329-9169).

Wang, Y., Zhang, Y., Rahimi, M., Pedram, M. (2014). Life-cycle inventory and energy analysis of FinFET integrated circuits. *Proceedings of the International Symposium on Sustainable Systems and Technologies*, 18-21 May, Oakland, Ca.

Natarajan, M., Rahimi, M., Sen, S., Mackenzie, N., Imanbayev, Y. (2014). Living Wall Systems: Evaluating Life-Cycle Energy, Water and Carbon Impacts. *Journal of Urban Ecosystems*, published online in May, DOI 10.1007/s11252-014-0378-8.

Kim, J., Rahimi, M. (2014). Future energy loads for a large-scale adoption of electric vehicles in the City of Los Angeles: Impacts on greenhouse gas (GHG) emissions. *Energy Policy*, Vol. 73, Pages 620-630 (5-year Impact Factor of 3.402).

Wang, Y., Zhang, Y., Rahimi, M., Pedram, M. (2014). A life-cycle energy analysis of FinFET Integrated Circuits. Proceedings of the International Symposium on Sustainable Systems and Technologies, Oakland, Ca, May 19-21.

Rahimi, M., Madni, A.M. (2014). Toward A Resilience Framework for Sustainable Engineered Systems. Conference on Systems Engineering Research (CSER 2014), Redondo Beach, Ca.

Wang, Y., Shafaei, A., Rahimi, M., and Pedram, M. (2015). Life-Cycle Energy Analysis of Sub-10nm Deeply-Scaled FinFET Micro-Processors. International Symposium on Sustainable Systems and Technology 2015, Dearborn, MI.

Meshkati, M., Tabibzadeh, M., Farshid, A., Rahimi, M., and Alhanaee, G. (2016). People-Technology-Ecosystem Integration: A Framework to Ensure Regional Interoperability for Safety, Sustainability and Resilience of Interdependent Energy, Water and Seafood Sources in the (Persian) Gulf. Human Factors: the Journal of Human Factors and Ergonomics Society, 58(1):43-57. doi: 10.1177/0018720815623143. This article won the 3rd best paper award in a special issue on Global Human Factors competition. HFES is the highest ranking journal in the field of human factors engineering.

Conference Proceedings

Rahimi, M. and Wierwille, W.W. (1982). Evaluation of the sensitivity and intrusion of workload estimation techniques in piloting tasks emphasizing mediational activity. *Proceedings, IEEE International Conference on Cybernetics and Society,* Seattle, WA, October, 593–597.

Rahimi, M., Wierwille, W.W. and Casali, J.G. (1984). The experimental evaluation of mediational workload measurement. *Proceedings, International Conference on Occupational Ergonomics,* Human Factors Association of Canada, Toronto, Canada, May, 30–33.

Malzahn, D.E. and Rahimi, M. (1984). A microcomputer relaxation technique using sample statistics for describing relationship between human factors measures. *Proceedings, Human Factors Society Annual Meeting*, San Antonio, TX, October, 48–52.

Rahimi, M. (1984). System safety approach to robot safety. *Proceedings, Human Factors Society Annual Meeting*, San Antonio, TX, October, 102–106.

Rahimi, M. and Malzahn, D.E. (1984). Manual ability evaluation: device, measure, and reliability. *Proceedings*, *Human Factors Society Annual Meeting*, San Antonio, TX, October, 183–187.

Rahimi, M., and Malzahn, D.E. (1984). Reliability of devices measuring physical ability, *Proceedings, The Second International Conference on Rehabilitation Engineering, Ottawa*, Canada, June, 85–87.

Malzahn, D.E. and Rahimi, M. (1984). A philosophy of ability evaluation. *Proceedings, The Second International Conference on Rehabilitation Engineering, Ottawa*, Canada, June, 87–89.

Rahimi, M., Malzahn, D.E., and Musa, M.H. (1985). Hand preference and difference patterns using the Available Motions Inventory (AMI). *Proceedings, Human Factors Society Annual Meeting*, Baltimore, MD, September, 167–171.

Rahimi, M. (1985). Safety engineering: Directions in education and research. Paper presented at *The American Society of Engineering Education Annual Conference,* San Antonio, TX, October, 327–330.

Rahimi, M. (1986). Introduction of robots into hybrid work stations: The system safety concerns. A panel abstract in *Human Factors in Organizational Design and Management, II*, Amsterdam, The Netherlands: North-Holland.

Rahimi, M. (1986). Issues in safety of robots using sensory systems. *Proceedings*, *Robots West Conference-ULTRATECH,* Society of Manufacturing Engineers, Long Beach, CA, September, 3–91 to 3–104.

Briggs, R.P. and Rahimi, M. (1986). Safety related applications of simple optically based sensors for robots. *Proceedings, Human Factors Society Annual Meeting,* Dayton, OH, 1424–1427.

Rahimi, M. and Hancock, P.A. (1986). Perception-decision-action processes in operator collision avoidance with robots. *Proceedings, Annual Meeting of the Human Factors Association of Canada,* Vancouver, B.C, Canada, 119–122.

Rahimi, M. and Abedini, K. (1986). Ergonomics and safety in user-VDT interaction. *Industrial Safety Chronicle, Vol XVII*, *No. 5*. The National Safety Council, New Delhi, India, 164–172.

Karwowski, W., Plank, T., Parsaei, M. and Rahimi, M. (1987). Human perception of the maximum safe speed of robot motions. *Proceedings*, *Human Factors Society Annual Meeting*, New York, 1.186–1.190.

Karwowski, W., Rahimi, M., Nash, D.L., and Parsaei, R. (1988). Perception of safety zone around an industrial robot. *Proceedings*, *Human Factors Society Annual Meeting*, Anaheim, CA.

Mihaly, T., Hancock, P.A., Vercruyssen, M. and Rahimi, M. (1988). Time estimation performance before, during and after physical activity. *Proceedings, Human Factors Society Annual Meeting,* Anaheim, CA.

Rahimi, M. and Roland H.E. (1989). A quantitative fault tree analysis for safety of human-robot interactions. *Proceedings*, *9th International System Safety Conference*, Long Beach, California.

Hancock, P.A., Rahimi, M., Wulf, G. & Briggs, R. (1989). Analyzing the behavior of left-turning drivers. *Proceedings, 12th NATO Conference on Experimental Safety Vehicles*. Gothenburg, Sweden, June.

Rahimi, M. (1989). A task, behavior, and environmental analysis for automobile left-turn maneuvers. *Proceedings, Human Factors Society 33rd Annual Meeting*, Santa Monica, CA: Human Factors Society.

Wulf, G., Hancock, P.A., and Rahimi, M. (1989). Some causes of automobile-motorcycle collisions. *Proceedings, Human Factors Society Annual Meeting*, Denver, CO.

Rahimi, M. (1990). Disabled occupant behavior in earthquakes. Presented at the *15th Annual Hazards Research and Applications Workshop*. Boulder, Colorado: Natural Hazards Research and Application Center, July.

Rahimi, M. and Azevedo, G. (1990). A task analysis of industrial robot teach programming. *Proceedings, 2nd International Conference on Human Aspects of Advanced Manufacturing and Hybrid Automation*. Honolulu, Hawaii.

Rahimi, M. (1990). Occupant behavior in earthquakes. *Proceedings, Disasters in Small Dwelling: Defining an International Agenda for the IDNDR*. Oxford Polytechnic, Disaster Management Centre, UK.

Rahimi, M. (1991). Earthquake safety and human behavior. *Proceedings, First International Conference on Seismology and Earthquake Engineering*, Tehran, Iran, May 27-29.

Rahimi, M. (1991). The human factors in earthquake safety. *Proceedings, UCLA International Conference on Impact of Natural Disasters*. Los Angeles, July 10-12.

Rahimi, M. (1991). Hazards faced by physically disabled occupants during earthquakes. *Proceedings, 16th Annual Hazards Research and Applications Workshop*. Boulder, Colorado: Natural Hazards Research and Application Center, July 14-18.

Rahimi, M. (1991). Occupant behavior and hazards of building contents. Proceedings, *3rd US/Japan Workshop on Urban Earthquake Hazard Reduction*. Honolulu, Hawaii: Earthquake Engineering Research Institute, November 13-15.

Rahimi, M. (1992). Human factors in occupational safety and health. A panel discussion in *Occupational Safety and Health Summit*. Washington, D.C., February 18-19.

Rahimi, M. (1992). Earthquake preparedness and education. Proceedings, *First International Conference on Disaster Prevention in Urban Areas*, Tehran, Iran, May 10-13.

Rahimi, M. (1992). Classification and analysis of occupant behavior during earthquake shaking. *Proceedings, 10th World Conference on Earthquake Engineering*. Madrid, Spain, July 19-25.

Rahimi, M. (1994). Managing the work environment in the 21st century. A panel discussion in MINERVA International III. Scottsdale, Arizona, May 25.

Rahimi, M., Hulthage, I. and Gasser, L. (1995). A constraint-based approach for earthquake casualty modeling in manufacturing systems. *The International Emergency Management and Engineering Conference*, Sophia Antopolis, France, May 9-12.

Page, C. P. and Rahimi, M. (1995). Concurrent and Retrospective Verbal Protocols in Usability Testing: Is There Value Added in Collecting Both*? Proceedings, 39th Annual Meeting, Human Factors and Ergonomics Society*. San Diego, California.

Rahimi, M. (1998). Managing product design teams: virtual collaboration versus co-location. *The 2nd International Conference in Engineering Design and Automation*. Maui, Hawaii.

Rahimi, M. and Weidner, M. (1999). Incorporating Design for Environment (DFE) into Quality Function Deployment: Voice of the environmental customer. The *3rd International Conference in Engineering Design and Automation*, Vancouver, Canada, August 1-4.

Rahimi, M. and Meshkati, M. (2001). Human factors in highway-rail crossing accidents: the influence of driver decision style. *Driving Assessment 2001*, Snowmass, Colorado, August 12-16.

Rahimi, M. (2001). Industrial Ecology: The Role of Environmental Life-Cycle Analysis in Transportation Systems. Road Ecology Center, John Muir Institute of the Environment, University of California, Davis. Available at eScholarship Repository: http://repositories.cdlib.org/jmie/roadeco/Rahimi2001a/

Rahimi, M. (2002). Computer-aided demand-response transit dispatching: A human-computer interaction perspective. The *6th International Conference in Engineering Design and Automation*, Maui, August 4-7.

Rahimi, M., Dessouky, M., Yenice-Ay, B., Pourmohammadi, H., and Vos, R. (2003). Greening of industrial materials networks in Los Angeles County: Reverse logistics model development. *Annual Industrial Engineering Research Conference*, Portland, Oregon, May 17-21.

Banerjee, T., Rahimi, M. Bahl, D., Jackson, D., Mitechell, L. Pourmohammadi, H., Vanderbeek, M. and Vos, R. (2004). On charting the frontiers of Industrial Ecology: A review. *Greening XIII Conference*, Los Angeles, CA, Jan. 24.

Pourmohammadi, H., Rahimi, M., Dessouky, M., Rigby, D., and Vos, R. (2004). Green logistics for regional Industrial Waste Material and By-Products. *Industrial Engineering Research Conference*, Houston, TX.

Rahimi, M., Russell, J. and Placencia, G. (2004). Applying user-centered design methodology to Portable Lightweight GPS Receiver (PLGR) interface. *Universal Access*, Vienna, Austria.

Rahimi, M. (2004). Safety and environmental concerns in construction industry. A panel discussion in the Annual Industrial Engineering Research Conference, Construction Division, May 18, Houston, Texas.

Vos, R., Rahimi, M., Rigby, D., and Pourmohammadi, H. (2005). Cluster analysis technique for regional materials flows and urban sustainability. *The 3rd International Conference of the International Society for Industrial Ecology*, Stockholm, Sweden, June 12-15.

Rahimi, M. and Placencia, G. (2005). Generalized Performance Evaluation for Haptic Force Feedback Interfaces: A Review of Tactile Sensing for Object Recognition. *1st International Conference on Virtual Reality*, Las Vegas, July 27.

Rahimi, M. (2007). Wayfinding Technology in Early Stage Alzheimer's Patients. *9th European Conference on Advances in Assistive Technology*. San Sebastian, Spain, October 4.

Rahimi, M., Harrison, R., and Asef-Vaziri, A. (2007). Integrating inland ports into the intermodal goods movement system for ports of Los Angeles and Long Beach. An abstract in the *1st National Urban Freight Conference*, Los Angeles, Ca, Dec. 5.

Asef-Vaziri, A., Khoshnevis, B., and Rahimi, M. (2008). Design and analysis of an automated container handling system in seaports. *20th Annual CSU-POM Conference*. CSU-East Bay, Feb. 23.

Rahimi, M. and John, A. (2008). Key Experiences in Developing a Sustainable Water Distribution and Filtration Project in Rural Honduras: A New Paradigm in "Service Learning". *2008 American Society for Engineering Education Annual Conference and Exposition*, Pittsburgh, PA, June 22.

Rahimi, M., Khoshnevis, B., and Arhami, M. (2009). Contour Crafting: A New Automated Construction Technology and its Benefits to the Environment. *Fifth International Conference on Construction in the 21st Century* (CITC-V), May 20-22, Istanbul, Turkey.

Asef-Vaziri, A., Rahimi, M., and Harrison, R. (2009). Potential for inland port development in Los Angeles. INFORMS of Southern California, Los Angeles (October 5).

Asef-Vaziri, A., Rahimi, M., and Harrison, R. (2010). Impact of an Inland Port on Inland Empire Freight Transportation Network. *51st Annual Transportation Research Forum*, Arlington, Virginia, March 11-13.

Placencia, G. and Rahimi, M. (2011). Development of a Cost Effective Lateral Motion Device for Haptic Tactile Sensing. *Human Computer Interaction International*, 2011, July 13, Orlando, Florida.

Rieger, K. and Rahimi, M. (2011). Bayesian Risk Identification Model (BRIM): A Predictive Model to Reduce Use Error Risk in Medical Device Interface Design. *2011 Annual Meeting of the Human Factors and Ergonomics Society*, Las Vegas, Nevada, September 22.

Rahimi, M., and Kim, J. (2011). Potential for Improving Port's Air Quality Performance with Electric Yard Tractors. *4th National Urban Freight Conference*, Long Beach, California, October 12.

Zhaohu, F., Rahimi, M., and Moore, J. (2011). A Simulation Study of Logistics Operations at San Pedro Bay Port of Long Beach and Los Angeles. *61st Annual IIE Conference & Expo*, Reno, Nevada, May 21-25.

Rahimi, M. (2012). Sense of Touch in Haptic Systems. *UPA International 21st Conference*, Henderson, NV, June 5.

Natarajan, M., Mackenzie, N., Sen, S., and Rahimi, M. (2012). Green Facades: A Life-Cycle Analysis for Environmental Impacts. 9th Conference on FAÇADE TECTONICS, University of Southern California, Los Angeles, CA, November 30.

Rahimi, M., Madni, A.M. (2014). Toward A Resilience Framework for Sustainable Engineered Systems. Conference on Systems Engineering Research (CSER 2014), Redondo Beach, Ca.

Books

Karwowski, W. and Rahimi, M. (Editors) (1990). *Ergonomics of Hybrid Automated Systems II.* Amsterdam: Elsevier Science Publishing.

Rahimi, M. and Karwowski, W. (Editors) (1992). *Human-Robot Interaction.* London: Taylor and Francis.

Book Chapters

Marley, R.J., Rahimi, M., Malzahn, D.E., and Hommertzhiem, D.L. (1984). Meta-analysis of age-dependent design parameters: A modified relaxation technique. In H.W. Hendrick and O. Brown, Jr. (Eds.) *Human Factors in Organizational Design and Management,* Elsevier Science Publishers.

Wierwille, W.W., Casali, J.G., Conner, S.A. and Rahimi, M. (1985). Evaluation of the sensitivity and intrusion of mental workload evaluation techniques. In W.D. Rouse (Ed.) *Advances in Man-Machine Systems Research.* Vol. II, Greenwich, Connecticut, JAI Press, Inc., 51–127.

Rahimi, M. and Hancock, P.A. (1986). Optimization of hybrid production systems: The integration of robots in human-occupied work environments. In H.W. Hendrick and O. Brown, Jr. (Eds.) *Human Factors in Organizational Design and Management II* , Amsterdam, The Netherlands: North-Holland.

Rahimi, M., Hancock, P.A., and Chignell, M.H. (1987). Integrated software safety design for robotics. In S.S. Asfour (Ed.) *Trends in Ergonomics/Human Factors IV*, Amsterdam, The Netherlands: North-Holland.

Rahimi, M., and Hancock, P.A. (1988). Sensors Integration. In Richard C. Dorf (Ed.) *The International Encyclopedia of Robotics: Applications and Automation,* New York: John Wiley and Sons (winner of the Best Reference Book award in 1988 by the American Publishers Association).

Hancock, P.A., Rahimi, M., Mihaly, T. and Meshkati, N. (1988). Research guide: Mental workload applications in human factors. In P.A. Hancock and N. Meshkati (Eds.) *Human Mental Workload*, Amsterdam, The Netherlands: North-Holland.

Rahimi, M. and Malzahn, D.E. (1988). A physical ability evaluation system used in rehabilitation engineering. In A. Mital (Ed.) *Ergonomics in Rehabilitation,* London, UK: Taylor and Francis.

Majchrzak, A. and Rahimi, M., (1988). Human factors effects of transitioning to CIM. In C.E. Blache (Ed.) *Success Factors for Implementing Change: A Manufacturing Viewpoint,* Dearborn, MI: Society of Manufacturing Engineers / Elsevier.

Rahimi, M. (1988). Critical issues in safety of software-dominant automated systems. In W. Karwowski, H.R. Parsaei and M. Wilhelm (Eds.) *Ergonomics of Hybrid Automated Systems I*, Amsterdam, The Netherlands: North-Holland.

Majchrzak, A. and Rahimi, M. (1988). Differential organizational impacts of transition from stand-alone to integrated flexible production. In W. Karwowski, H.R. Parsaie and M. Wilhelm (Eds.) *Ergonomics of Hybrid Automated Systems I,* Amsterdam, The Netherlands: North-Holland.

Karwowski, W., Parsaei, H.R., Nash, D.L. and Rahimi, M. (1988). Human perception of the work envelope of an industrial robot. In W. Karwowski, H.R. Parsaei and M. Wilhelm (Eds.) *Ergonomics of Hybrid Automated Systems I,* Amsterdam, The Netherlands: Elsevier Science Publishers.

Meshkati, N., Hancock, P.A. and Rahimi, M. (1989). Techniques in mental workload assessment. In J. Wilson (Ed.) *Evaluation of Human Work: Practical Ergonomics Methodology,* London, UK: Taylor and Francis.

Karwowski, W., and Rahimi, M. (1991). A study of worker intrusion into robot work envelope. In J.H. Graham (Ed.) *Safety, Reliability, and Human Factors in Robotic Systems*. New York: Van Nostrand Reinhold.

Rahimi, M. (1991). Occupant behaviour in earthquakes. In A. Aysan (Ed.) *Disasters and the Small Dwelling*. London: James & James (Science Publishers) Ltd.

Karwowski, W., Jarvinen, J., and Rahimi, M. (1994). Human Aspects of Industrial Robotics. In: G. Salvendy and W. Karwowski (Editors), *Design of Work and development of Personnel in Advanced Manufacturing*. pp. 493-534, John Wiley & Sons.

Meshkati, N., Hancock, P.A. and Rahimi, M. and Dawes, S. (1995). Techniques in mental workload assessment. In J. Wilson and N. Corlett (Eds.) *Evaluation of Human Work: A Practical Ergonomics Methodology,* (Second Edition) London, UK: Taylor and Francis.

Rahimi, M. (1997). Hazard Identification and Control. In R. C. Dorf (Editor): *The Engineering Handbook*, CRC Press, New York, N.Y.

Rahimi, M. (1998). Occupational Safety in Robotics. In W. Karwowski (Editor): *The Industrial Ergonomics Handbook*, CRC Press, New York, N.Y.

Rahimi, M. (1998). Managing Sources of Hazards in Engineered Systems. In R. C. Dorf (Editor) *The Technology Management Handbook*, CRC Press, New York, N.Y.

Rahimi, M. (2004). Hazard Identification and Control. In R. C. Dorf (Editor): *The Engineering Handbook*, CRC Press, New York, N.Y.

Rahimi, M., Placencia, G., Maclean, J. (2004). Human-Computer Interaction. In R.C. Dorf (Editor): *The Engineering Handbook*, CRC Press, New York, N.Y.

Presentations

Mental workload evaluation techniques. Presented at the Department of Industrial Engineering, University of Alabama, Tuscaloosa, AL, May, 1982.

Evaluation of the sensitivity and intrusion of workload estimation techniques in piloting tasks emphasizing mediational activity. Presented at the IEEE International Conference on Cybernetics and Society, Seattle, WA, October, 1982.

Evaluation of sixteen measures of mental workload elicited by mediational activity. Presented at the International Conference on Occupational Ergonomics, Toronto, Canada, May, 1984.

Integration of age-dependent anthropometric data is using a modified relaxation technique. Presented at the First International Symposium on Human Factors in Organization Design and Management, Honolulu, HI, August, 1984.

Manual ability evaluation: device, measure, and reliability. Presented at the 28th Annual Meeting of the Human Factors Society, San Antonio, TX, October 1984.

System safety approach to robot safety. Presented at the 28th Annual Meeting of the Human Factors Society, San Antonio, TX, October 1984.

Application of system safety methodologies to robot safety. Presented at the Institute of Safety and Systems Management University of Southern California, Los Angeles, CA, May, 1985.

Hand preference and difference patterns using the Available Motions Inventory (AMI). Presented at the 29th Annual Meeting of the Human Factors Society, Baltimore, MD, October 1985.

Safety of robots and automated technologies. A four-hour presentation to the USC ISSM Study Center at Mather AFB in Sacramento, CA, February, 1986.

Issues in safety of robots using sensory systems. Presented at the Robots West Conference, Society of Manufacturing Engineers Ultratech Conferences, Long Beach, CA, September, February, 1986.

Introduction of robots into hybrid work stations: the system safety concerns. A panel presentation at the Second International Symposium on Human Factors in Organizational Design and Management, Vancouver, B.C., Canada, August, 1986.

Integrated software safety design for robotics. Presented at the 2nd International Industrial Ergonomics and Safety Conference, Miami, FL, June, 1987.

Critical issues in the safety of software-dominant automated systems. Presented at the First International Conference on Ergonomics of Advanced Manufacturing and Hybrid Automated Systems, Louisville, KY, August, 1988.

Application of robotics and safety in law enforcement. Presented at the Annual Peace Officers Standards and Training Workshop, Sacramento, CA, August 1988.

A quantitative fault tree analysis of robot programmers. Presented at the 9th International System Safety Conference, Long Beach, CA, July 1989.

Work-related safety concerns in industrial countries. Presented at the Association of Professors and Scholars of Iranian Heritage, Los Angeles, CA, October, 1989.

Earthquake hazards and behavior of physically disabled. Presented at the 15th Annual Hazards Research and Applications Workshop, Boulder, Colorado, July 15-18, 1990.

A task analysis of industrial robot teach programmers. Presented at the 2nd International Conference on Human Aspects of Advanced Manufacturing and Hybrid Automated Systems. Honolulu, Hawaii, August 12-16.

Occupant behavior in earthquakes. Presented at the International Invitational Conference: Disasters and the Small Dwellings, Defining the Agenda for the International Decade for Natural Disaster Reduction. Oxford, UK, September, 2-6, 1990.

Hazards faced by physically disabled occupants during earthquakes. Presented at the 16th Annual Hazards Research and Applications Workshop. Boulder, Colorado: Natural Hazards Research and Application Center, July 14-18, 1991.

Earthquake preparedness and education. Presented at the *First International Conference on Disaster Prevention in Urban Areas*. Tehran, Iran, May 10-13, 1992.

Classification and analysis of occupant behavior during earthquake shaking. Presented at the *10th World Conference on Earthquake Engineering*. Madrid, Spain, July 19-25, 1992.

Managing the work environment in the 21st century. Presented at the MINERVA International III. Scottsdale, Arizona, May 25, 1994.

A constraint-based approach for earthquake casualty modeling in manufacturing systems. Presented at the *International Emergency Management and Engineering Conference*, Sophia Antopolis, France, May 9, 1995.

Managing product design teams: virtual collaboration versus collocation. Presented at the *2nd International Conference in Engineering Design and Automation*. Maui, Hawaii, August, 1998.

A methodology for human-computer systems analysis of dispatching tasks in paratransit operations. Presented at the Los Angeles Chapter's *Human Factors and Ergonomics Society Annual Symposium*, Nov. 13, Tustin, CA, November, 1999.

Mapping the complexity of computer-aided dispatching tasks. Presented at a joint United Postal Service/USC research seminar on logistics, Los Angeles, CA, January 2000.

Human factors in highway-rail crossing accidents: the influence of driver decision style. *Driving Assessment 2001*, Snowmass, Colorado, August 15, 2001.

Computer-aided demand-response transit dispatching: A human-computer interaction perspective. The *6th International Conference in Engineering Design and Automation*, Maui, August 4-7, 2002.

Modeling Eco-Industrial Symbiosis: Greening of Regional Industrial Materials Networks. NSF Workshop on Material Use, Science, Engineering and Society, January, Washington DC, February, 2003.

On Charting the Frontiers of Research on Industrial Ecology: A Review. *The Greening VIII Conference*, Los Angeles, CA, January 24, 2004.

Safety and Environmental Concerns in Construction Industry, *IIE Annual Conference and Exhibition*, Houston, Texas, May, 2004.

Applying user-centered design methodology to Portable Lightweight GPS Receiver (PLGR) interface. *Universal Access*, Vienna, Austria, June 2004.

Cluster analysis technique for regional materials flows and urban sustainability. The 3rd International Conference of the International Society for Industrial Ecology, Stockholm, Sweden, June 14, 2005.

Generalized Performance Evaluation for Haptic Force Feedback Interfaces: A Review of Tactile Sensing for Object Recognition. 1st International Conference on Virtual Reality, Las Vegas, July 27, 2005.

Application of life-cycle assessment to environmental impact assessment, 2nd International Conference on Quantified Eco-Efficiency Analysis for Sustainability, Netherlands, June 30, 2006.

Life-Cycle Assessment. Online Conference organized by nanoregnews.com entitled: The Future of Nanotechnology, July 22, 2007.

Wayfinding Technology in Early Stage Alzheimer's Patients. 9th European Conference for the Advancement of Assistive Technology, October 4, 2007.

Integrating Inland Ports into the Intermodal Goods Movement System for Ports of Los Angeles and Long Beach. 2nd National Urban Freight Conference, Metrans, Los Angeles, December 5, 2007.

Connecting the "Global" with the "Local": Engineers Without Borders-USC. Campus-Community Partnerships for Service, Teaching and Research. USC Community-Based Learning Collaborative and USC Joint Educational Program, April 18, 2008.

Potential for Inland Port Development in Los Angeles. Metrans Seminar Series, School of Policy Planning and Development, USC, November 19, 2008.

Contour Crafting: A New Automated Construction Technology and its Benefits to the Environment. *Fifth International Conference on Construction in the 21st Century* (CITC-V), May 20-22, Istanbul, Turkey, 2009.

Integrating Inland Ports into Southern California Freight Transportation Network. INFORMS, Southern California Chapter, Glendale, Ca, October 6, 2009.

Impact of an Inland Port on Inland Empire Freight Transportation Network. 51st Annual Transportation Research Forum, Arlington, Virginia, March 12, 2010.

A Simulation Study of Logistics Operations at San Pedro Bay Ports of Long Beach and Los Angeles. 16th UTC Student Conference, UC Irvine Student Center, April 2, 2010. Presented by Zhaohu Fan, an MS student in Epstein ISE Department.

A Study of Truck Collisions with Focus on California SR-60. California State University – Production and Operations Management 23rd Annual CSU-POM Conference, Feb. 18, 2011.

Does Port Electrification Help Achieve the Port of Los Angeles Mandated Emissions Targets? 52nd Annual Transportation Research Forum. Long Beach, CA. March 10, 2011.

Potentials for Exclusive Truck Road on State Route 60 in Southern California. 52nd Annual Transportation Research Forum, Long Beach, California, March 12, 2011.

Impact of Inland Ports on Southern California's Freight Transportation Network. 40th Annual Meeting of Western Decision Science Institute, Portland, OR, April 5-8, 2011.

Development of a Cost Effective Lateral Motion Device for Haptic Stimulation. Human-Computer Interaction International Conference, Orlando, Florida, July 9-14, 2011.

Potential for Improving Port's Air Quality Performance with Electric Yard Tractors. 4th METRANS National Urban Freight Conference. Long Beach, CA. October 12, 2011.

Sense of Touch in Haptic Systems. 21st UPA International Conference, Henderson, NV, June 5, 2012.

HCI Toward Digital Aging. A presentation to the Gerontology/Engineering Collaboration Planning Retreat, April 9, 2013, University of Southern California.

Large-Scale Adoption of Electric Vehicles in Los Angeles. A poster session at the Environmental Sustainability Research Network, April 26, 2013, University of Southern California.

Determining Energy Load Requirements of an Electrified Transportation Sectors in Los Angeles: Impacts on Greenhouse Gas Emissions. Western Energy Policy Research Conference, Portland, Oregon, September 5, 2013.

Future Energy Load Requirements from Electric Vehicles for Los Angeles County. Plug-In 2014 Conference, San Jose, Ca, July 28, 2014.

Stress Relieving Technology Tools for Alzheimer's Patients. *Proceedings of the Global Conference on Health Systems Engineering 2014 Istanbul, Turkey, August 3-5, 2014.*

Technical Reports

Rahimi, M. (1982). Evaluation of workload estimation techniques using simulated piloting tasks emphasizing mediational activity. Unpublished Ph.D. dissertation, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

Wierwille, W.W., Rahimi, M., and Casali, J.G. (1983). Evaluation of sixteen measures of mental workload using a simulated flight task emphasizing mediational activity. In W.W. Wierwille and J.G. Casali (Eds.) *The sensitivity and intrusion of mental workload estimation techniques in piloting tasks.* Dept. of I.E.O.R., Virginia Polytechnic Institute and State University, Report No. 8309, September, pp. 104–146.

Malzahn, D.E. and Rahimi, M. (1983). Analysis of functional abilities of neurologically impaired populations (year 1). Wichita State University, Rehabilitation Engineering Center, December.

Rahimi, M. and Malzahn, D.E. (1984). Analysis of functional abilities of neurologically impaired populations (year 2). Wichita State University, Rehabilitation Engineering Center, December.

Rahimi, M. (1988). Design of interactive robotic graphics for safety. University of Southern California, SOCRATES project, July.
Rahimi, M. (1989). A driving task analysis. Motorcycle Conspicuity Research Group, Department of Safety Science, University of Southern California, January.
Rahimi, M. (1990). Earthquake Hazards and Disabled. Institute of Safety and Systems Management, University of Southern California, June.
Rahimi, M. and Azevedo, G. (1991). Behaviors and hazards faced by physically disabled occupants during the Loma Prieta earthquake of October, 1989. University of Southern California, Report No. EH/D-1-91, March.
Rahimi, M. and Azevedo, G. (1992). Earthquake hazards and the disabled. Final Report, University of Southern California, December.
Rahimi, M. (1993-97). NIOSH annual reports for the Occupational Safety component of the Southern California Educational Resource Center.
Rahimi, M. (1993-97). NIOSH semi-annual reports for the Hazardous Substance Academic Training component of the Southern California Educational Resource Center.
Rahimi, M. (1996). NIOSH annual report for the Occupational Safety component of the Southern California Educational Resource Center.
Rahimi, M., Dessouky, M., Gounaris, I., Placencia, G., & Weidner, M. (2000). A task decomposition model for dispatchers in dynamic scheduling of demand responsive transit systems. A final report to METRANS – National Center for Metropolitan Transportation Research. Available at <http://www.metrans.org>.
Rahimi, M. (2001). Green Transit Systems: using Performance Optimization Technology with Environmental Life Cycle Assessment. A final report to AT&T Research Foundation, Faculty Fellowship in Industrial Ecology.
Dessouky, M., Rahimi, M., & Weidner, M. (2002). Green transit scheduler: A methodology for jointly optimizing cost, service, and environmental performance in demand-responsive transit scheduling. A final report to METRANS – National Center for Metropolitan Transportation Research, USC/CSULB. Available at <http://www.metrans.org>.
Meshkati, N., Rahimi, M., M. Driver (2003). Investigating the Role of Driver Decision Styles in Highway-Rail Crossing Accidents. Final Report to METRANS (National Center for Metropolitan Transportation Research), USC/CSULB.
Banerjee, T., Rahimi, M., Mitchell, L., Bahl, D., Jackson, D. (2004). *Research Agenda for Eco-Industrial Development in the United States*. A Report to the National Science Foundation, April, 2004.
Meshkati, N., Rahimi, M., Torabzadeh, J. (2007). Study of the Exposition Light Rail Safety for Pedestrians and Drivers. Final Report to METRANS.
Rahimi, M. (2007). Nanotechnology and life-cycle assessment. Final Report from a workshop prepared for EPA and hosted by the Pew Charitable Trust, Woodrow Wilson International Center for Scholars, EPA Headquarters, Washington, D.C.
Rahimi, M., Asef-Vaziri, A., Harrison, R. (2008). Integrating Inland Ports into the Intermodal Goods Movement System for Ports of Los Angeles and Long Beach. Final Report to METRANS.
Asef-Vaziri, Middleton, Rahimi, 2010. Feasibility Analysis of Integrating Exclusive Truck Roads into SR60 Freight Corridor, Report to the Leonard Transportation Center.
Joshua Newell, Mansour Rahimi, Jae D. Kim, Alison Linder, Afsin Askogan, Olivia Lu-Hill, and Eric Lee (November, 2011). Moving Containers Efficiently with Less Impact: Modeling and Decision-Support Architecture for Clean Port Technologies (METRANS Project: 10-06).

Non-Technical Publications

Rahimi, M. (1985). Workstation design for disabled. *Worker Connection,* Occupational Safety and Health Program, Institute of Industrial Relations, The UCLA Labor Center, Fall.
Rahimi, M. (1987). Darn Robots. *USC Engineer*, *37*, (1), 17–21.
Rahimi, M. (1989). Caution: Robots at work. *Training Magazine*, July, 26(7), p.12.
Rahimi, M. (1989). Robot Safety Standards. *Design News*, July, p. 220.
Rahimi, M. (1991). Disabled Overlooked in Quake Planning, *Los Angeles Times* July 1, 1991.

M.S. and PhD Student Mentoring

M.S. Thesis:

Chair: "Hand performance differences using the Available Motions Inventory," by M. Hisham Musa, M. S. in *Industrial Engineering*, Wichita State University, Dec., 1985.

Member: "Effects of background cueing mechanisms on the reduction of reaction times in a visual search task," by Scott A. Lyle, M. S., in *Industrial Engineering*, Wichita State University, June, 1985.

Member: "Effects of stereotyping monitor type and task difficulty on tele-operator performance and operator subjective states" by Sherman A. Thompson, M.S. in USC-ISSM center in Hawaii, 1987.

Member: "Comparison of Visual Display Terminal Performance for Telecommuters and Office Workers," - Steven Rosenberg, M. S. in Safety, University of Southern California, May, 1989.

Chair: "Effects of mobility impairment and earthquake intensity on ability to perform simple tasks in a post-earthquake simulation," - Glenn Azevedo, M. S. in Human Factors, May, 1993.

Member: "Cumulative Trauma Disorders and Semiconductor Manufacturing Process Layout" - Thomas Sallas, MS in Safety and Health, 1994

Member: "A comparison of an ecological and traditional user interface for the control room of a nuclear power plant" - Brian Buller, MS in Human Factors, July, 1994

Chair: "Comparison of concurrent and retrospective verbal protocols in a study of human error in an information retrieval system" - Colleen Phillips, MS in Human Factors, August, 1995.

Member (Master's Thesis Committee): "GIS and Electric Vehicles: An Analysis of Spatial Diffusion in Los Angeles County" – Samantha Stieger, MS in Geographical Information Science and Technology, Spatial Science Institute, USC Dornsife School of LAS, September 2013-present.

Member: "A site suitability analysis for an inland port to service the port of Los Angeles and the Port of Long Beach." – Emily Frazier, MS in Geographical Information Science and Technology, Spatial Sciences Institute, USC Dornsife, 2013-14.

PhD Guidance/Dissertation:

Member (Dissertation Committee): "Vehicle Routing for Longhaul Operations under Cyclic Constraints" - *Cenk Caliskan*, graduated from Industrial and Systems Engineering, USC, 1999

Member (Guidance Committee): "Vehicle Routing with Stochastic Customers and Demand while Maintaining Driver Familiarity with Service Territories" - *Hongsheng Zhong*, 2000.

Member (Guidance and Dissertation Committees): "The Effects of Electric Power Industry Restructuring on the Safety of Nuclear Power Plants in the United States" - *Tom Butler*, PhD Candidate in Human Factors.

Member (Qualification Committee): "Hybrid Scheduling for Paratransit Operations" – *Majid M. Aldaihani*, PhD Candidate in Industrial and Systems Engineering, 2002

Chair (Guidance and Dissertation Committees): "Green Transit Scheduler" - *Merrill Weidner*, PhD Candidate in Industrial and Systems Engineering, 2003. Winner of the U.S. Department of Transportation's outstanding graduate student research award.

Member (Qualification Committee): "Experimentation and Analysis of Contour Crafting (CC) using ceramic materials" – *Hong Kyu Kwon*, PhD Candidate in Industrial and Systems Engineering, 2002.

Member (Guidance and Dissertation Committees): "Effects of the Non-Uniform Chip Temperature on the Interconnect Performance and Signal Integrity in Very High Performance VLSI Systems" – *Amir H. Ajami*, PhD Candidate in Electrical Engineering-Systems, 2003.

Member (Qualification Committee): "Design and Fabrication of Segments of Full Scale Housing Structures by Layered Manufacturing" – *Dooil Hwang*, PhD Candidate in Industrial and Systems Engineering, 2004.

Chair (Qualification and Dissertation Committees): "Green Logistics for Regional Industrial Waste Materials and By-Products" – *Hamid Pourmohammadi*, PhD Student, ISE, 2005.

Chair (Qualification and Dissertation Committees): "Scheduling Theory for Emergency Operations Centers"– *Jennifer Russell*, PhD Student at ISE, recipient of the University Provost Fellowship; Winner of the Metrans Student of the Year Award; Recipient of the Charles William Koch Scholarship and Leadership Development from ENO Transportation Foundation,; Women's Transportation Seminar (WTS) - Los Angeles chapter's doctoral scholarship winner for 2004; WTS national organization's top student prize, the Helene M. Overly Memorial Graduate Fellowship, 2005.

Member (Dissertation Committee): "Cognitive Modeling of Iteration in Conceptual Design" – *Pawat Chusilp*, PhD student in Aerospace and Mechanical Engineering, 2004.
Member (Dissertation Committee): "Beyond Benefits and Costs: Understanding Outcomes of ITS Deployments in Public Transit" – *Thomas O'Brien*, PhD student in Policy, Planning and Development, 2005
Member (Qualification Committee): "Metallic Parts Fabrication Using the SIS Process" – *Mehdi Mojdeh*, PhD student in ISE, 2005.
Member (Qualification Committee): "Trowel-Path Planning for Contour Crafting" – *Zhenghao Yeh*, PhD student in ISE, 2005.
Member (Dissertation Committee): "Air-Crew Coordination and Communication: The Role of Decision Styles in Individual and Group Performance under Skill, Rule, Knowledge-Based Decision-Making" - *Susanne Dawes*, Industrial and Systems Engineering, 2006.
Member (Dissertation Committee): "A Value Based Design Methodology for Conceptual Design" – Daehwan Kim, PhD student in AME, 2007.
Member (Dissertation Committee): "Analysis of Piezo Electric Operated Valve for Abrasive Viscous Fluids" – Khashayar Behdinan, PhD in ISE, 2007.
Member (Qualification committee): "Formulating a New Approach to Model Value of Information for Environmental Research" – Mayank Mohan, Epstein ISE, 2008.
Member (Guidance Committee): "Design-for-Reliability: Starting From Conceptual Design" – Zhaofeng Huang, Department of Aerospace and Mechanical Engineering, Dec. 2008.
Member (Dissertation Committee): "Sustainable Ports: Motivations for Pollution Prevention" – Alison Linder, PhD in Policy Planning and Development, 2009.
Chair (Qualification and Dissertation Committees): "Haptic Lateral Sensing on Finger Pad" - *Greg Placencia*, PhD Student, ISE, 2003-2009.
Chair (Qualification and Dissertation Committees): "Integration of Human Factors Error Analysis, Risk Analysis, and Bayesian Belief Networks for Medical Product Evaluation" – Kathryn Rieger, PhD Student, ISE, 2006-2011.
Chair (Qualification and Dissertation Committees): "Environmental Effects of Electric Vehicle Technology Adoption in Urban Areas: A Case for Los Angeles County" – Jae Kim, PhD Student, ISE, 2010-2014.

- 2nd Prize winner (out of 40) at the Student Research on Environmental Sustainability poster session, USC, Los Angeles, May 8, 2013. Title: Potential energy load requirements of an electrified transportation sector in Los Angeles: Impacts on greenhouse gas and toxic pollutant emissions.
- 3rd Prize winner (out of 50), student poster presentation, the IEEE 2013 International Symposium on Sustainable Systems and Technology (ISSST) Conference, Cincinnati, Ohio, May 15, 2013. Title: Environmental Effects from Electric Vehicle Technology Adoption in an Urban Environment: Los Angeles County.
- Jae Kim is an Assistant Professor position at the Department of Industrial and Systems Engineering, Shiley-Marcos School of Engineering, University of San Diego, Fall 2014.

Member (Qualification Committee): "Freight Shipments, Greenhouse Gases and Polluting Emissions: Implications for California and the U.S." – Joongko cho, PhD, ISE, 2011-present.
Member (Qualification Committee): "A Risk Analysis methodology to Address Human and Organizational Factors Contribution to Offshore Safety with Focus on the Deepwater Horizon Accident" – Marayam Tabibzadeh, PhD, ISE, 2012-present.
Member (Qualification Committee): "SLA-based, Energy-Efficient Resource Management in Cloud Computing System" – Hadi Goudarzi, PhD candidate in Ming Sieh EE Department, 2012-present.
Member (Qualification Committee): "Human Centered Model-Based Systems Engineering" – Douglas Orellana, PhD, ISE, 2013-present.
Member (Qualification Committee): "Modeling Outcomes for Family-Based Home Healthcare" – Sanaz Massoumi, PhD candidate in Epstein ISE Department, 2013-present.
Member (Qualification Committee): "Identification of Hispanic Patient Preferences and Acceptability of a Behavioral Change and Social Support Prompting systems via Phone Messaging: A Conjoint Analysis," Maggie Ramirez, PhD candidate in Epstein ISE Department, 2014-present.
Member (Qualification Committee): "Design of an Information Structure for Positive Train Control System Safety" Yalda Khashe, PhD candidate in Epstein ISE Department, 2013-present.

Member (Qualification Committee): "Efficient Partitioning, Indexing and Querying of Geo-spatial Data on Cloud", Afsin Akdogan, PhD candidate in Computer Science, 2015.
Member (Qualification Committee): Analysis of Strength of Layered Structures Fabricated by Contour Crafting. Amir Mansouri, PhD candidate in ISE, 2015.
Member (Qualification Committee): Matt Petros, PhD in Computer Science, 2015.
Member (Qualification Committee): Xiao Yuan, PhD in ISE, 2015.
Member (Defense Committee): "Using A Human Factors Engineering Perspective To Design And Evaluate Communication And Information Technology Tools To Support Depression Care and Physical Activity Behavior Change Among Low-Income Latino Patients With Diabetes," Maggie Ramirez, PhD candidate in Epstein ISE Department, 2016.

SERVICE TO UNIVERSITY

Department of Industrial and Systems Engineering:
Member, Graduate Committee (since summer 97)
Chair, Undergraduate "Design Track" Committee, 97-98
Member, ISE Executive Committee (since 97)
Helped in rebuilding the Human Factors Laboratory (summer 97)
Invited member of Human Factors Laboratory Equipment Proposal (Feb. 98)
Chair, Student Grievance Committee (since 98)
Chair, MS in Engineering Management Admissions Committee (since Sept. 99)
Member, PhD Admissions Committee (since summer 97)
Chair, Graduate Committee (spring 01)
Member, Graduate Committee (Fall 01 and Spring 02)
Reviewer, Graduate Admission files (since 02)
Course Monitoring Responsibility for ISE370, ISE440, ISE470, ISE 564, ISE572 (since spring 02)
Member, Undergraduate Committee (03-04)
Member, AFR Review Committee, Feb./Mar. 03
Recipient, Best Teacher Award, Epstein ISE Department, 2004
Member, Faculty Recruitment Committee (ISE), Jan 05
Member, UG Committee, 04-05
Departmental Website Committee, 04-05, 05-06
Graduate Admission Committee, 04-05, 05-06
3-year junior faculty review committee, 04-05
ISE's strategic planning committee, working with the Dean's office, 06-07
Health systems committee, new curriculum, 06-07
Chair review committee, ISE, 06-07
Undergraduate committee, 06-07
Graduate admission committee, Engineering Management (on campus), 06-07
Chair, PhD admissions (07-08)
Member, Graduate Admission, MSEMT (07-08)
Member, faculty recruitment for three positions, Epstein Chair, junior ISE, and SAE (07-08)
Member, Chair Evaluation Committee, Fall 2009
ABET course reviewer and faculty monitor for 5 courses in ISE (07-present)
Member, Health Systems Engineering and Management, a new degree with PPD (07-present)
Course Monitor for ISE 440, 470, 570 and 576 (07-present)
Member, ISE Undergraduate Committee (2011)
Member, MS in Engineering Management committee (since 2010)
Chair, Course Evaluation Committee, ISE 382, ISE 232L
Reviewer, Dan Epstein Paper Competition, IIE, 2013
Member, ISE Undergraduate Committee 2013
ISE Course Review Committee for ISE 370 and 344 (2013-2014)
Attended IIE student/faculty mixer, Nov. 2013

Member, ISE Curriculum Quality Committee, 2013
Chair, ISE Engaged Learning Committee, 2013-2014
Member, ISE Merit Review Committee, 2014
Guest lecture presentations, ISE 470, 2014
Interviewed 6 tenure-track and 3 Non-tenure-track candidates for ISE faculty positions, spring 2014
Member, Course Monitoring Committee (ad hoc), 2014
Member, ISE Undergraduate Committee, 2014
Town hall meetings to interview undergraduates on BS curriculum redesign, 2014
Internship Advisor, Shuyue Li, ISE Department, summer 2015
Internship Advisor, Andres Trevino, ISE Department, summer 2015
Member, PhD Screening Exam for two students, Fall 2015
ISE 495 Advisor for student teams, since 2008

School of Engineering:
Member, Engineering Curriculum Committee (Sept. 97 – Sept. 99)
McNair Scholarship Program (Summer 99): Research Faculty Mentor for Amon Wilner (Senior from the Dept. of Computer Science), research title: Task Analysis for Computer Interfaces
Attended Preview USC program (since 98)
ISE Liaison to Seaver Science Library procurement (since 98)
Member, Engineering Multimedia (Fall 01, Spring 02)
At-Large Member, Appointment, Promotion and Tenure Committee (Fall 02)
Member, Joint Committee of APT and Engineering Faculty Council to review merit raises given by each department chair, Sp 03.
Member, Engineering Appointment, Promotion, Tenure Committee (02-04)
Evaluator, web site design from old AFR (designed in-house) to new (designed and maintained in Digital Measures). The review included all the HCI components of the previous web site.
Faculty Advisor for the USC Engineers Without Borders, spending more than 200 hours per year. We started this student organization in 2006 and now we have three projects (two water distribution and filtration projects and one school construction) in rural Honduras (two villages of La Estanzuela and Corral de Piedras). (06-present)
Faculty Advisor, Master's and Professional Programs (MAPP) (2007)
Attendant, Viterbi Division of Engineering Education, 2008-09
Member, Viterbi's effort to develop a new MS degree in Green Technologies. ISE 576 (Industrial Ecology: Technology-Environment Interaction) was developed and is now a core requirement for this degree (since 2009).
Member, MS in Green Technologies Committee, 2010-2011. The curriculum was redesign in 2011.
Member, Engineering Faculty Council, 2010-2012.
Founding Faculty Advisor, Engineers Without Borders – USC, a Viterbi-wide student organization dedicated to meet the basic needs (water, electricity, school house, etc.) in developing countries, 2006-2013.
Member, Appointments, Promotion and Tenure committee, 2011-2012 and 2012-2013.
Member, Engineering Faculty Council, 2012-13, 2013-14.
Member, MS in Green Technologies Committee, 2013-2014.
Member, Fleischer Prize Committee in Green Technology (inaugural best paper award), 2013-2014.
Member, APT/EFC Merit Review Committee, interviewed 9 department chairpersons and wrote a report to the Dean, spring 2014.
Viterbi/Tsinghua student poster presentations and faculty mixer, May 1, 2014.
Member, Viterbi Faculty Advisory Board, Center for Engineering Diversity, 2015.
Member, REACH diversity outreach program, April, 2016.

University-Wide:
Senate/University Committee on Undergraduate Education, 2000-2001
Judge, Symposium on Undergraduate Research, Spring 2002 (150 students, 95 entries, 6 categories)
Contributor, 3rd Annual Metrans Conference and Exhibit, March 02
Faculty Contributor, Executive Education Program, *Meeting the Sustainability Challenge*, USC Center for Sustainable Cities, Dec. 05.

Committee member, Provost's Future Fuels and Energy Initiative, USC, Sept. 06.
Faculty Contributor, Executive Education Program, *Sustainable Organization Series*, USC Center for Sustainable Cities, Nov. 06 and March 07.
Faculty Affiliate, Center for Sustainable Cities, LAS: Co-developed a new research forum with Hilary Bradbury-Huang and Bob Vos, called SEER (Sustainable Executive Enterprise Roundtable). SEER membership now comprises a number of companies interested in regional sustainability solutions to their supply chain. My role is to develop methods to assess the chain's environmental footprint. (2006-09).
Attended, USC Energy Institute retreat day-long sessions (07-present)
Presenter, Campus-Wide Community Partnership for Service, Teaching and Research, April 18th, 2008.
Attended, CSULB Webinar on Sustainability, Jan. 29, 2009.
Member of Review Committee, UCAR review for the Department of Geography, April, 2009.
Member, University Sustainability Program Committee, Sub-committee on Education and Research, biweekly, 2014.
Member, University Park Campus Radiation Safety Committee, monthly, 2014.
Attended all meetings of the USC Health Systems Improvement Collaborative, 2014.
Attended the USC Alumni Award, April, 2014.
Faculty Affiliate, Spatial Science Institute, University of Southern California, Dornsife College of LAS, since 2014.
Faculty Representative, Open Forum Meetings, Provost's Office, Faculty Diversity, Hiring and Retention, 2016.

Past Services

Institute of Safety and Systems Management (ISSM) Committees:

Chair,	Safety Science Computer Coordination Committee, 1985–90
Member,	Safety Science Research Committee, 1985–90
Member,	Safety Science Merit Review Committee, 1987, 1988,1989,1990
Director,	Automation Safety Research Laboratory, 1987–90
Member,	Safety Science Undergraduate Curriculum and Textbook Committee, 1986–90
Member,	Safety Science Alumni Association, 1988
Member,	Committee on Integration of Safety Science Graduate Degrees, 1989-1990
Member,	Special Committee for ISSM Academic Structure, 1990
Member,	Safety and Risk Unit, 1990
Member,	Human Performance Unit, 1990
Advisor,	UG Safety Internship Program, since 1991
Chair,	Bachelor of Science in Safety Program Revision Committee, 1992-93
Chair,	ABET Accreditation Committee, 1995
Member,	ISSM Core Curriculum Committee (ad hoc), 1987
Member,	ISSM Faculty Forum Steering Committee, 1986–1990
Member,	ISSM Computer Development Committee, 1987–1990
Member,	ISSM Library Committee, 1989-1990
Member,	ISSM Curriculum Committee, 1989-1990
Chair,	Student Admissions, Aid, and Retention Committee, 1990- present
Member,	Student Recruitment Committee, 1990-91
Member,	Tenure and Promotion Committee, January, 1991
Member,	Professional Programs Faculty Oversight Committee (Occupational Safety and Health), 1991
Contributor,	Human Factors Accreditation; American Society of Safety Engineers Accreditation, 1991-93
Faculty	Advisor and Coordinator, Safety and Health Degree Programs
Member,	Faculty Load Profile and Merit Committee, 93-95
Member,	ISSM Ph.D. Curriculum Proposal Committee, 1994

University Committees (while at ISSM):

Member,	USC Institute for Robotics and Intelligent Systems (IRIS), 1986–present
Alternate,	USC Faculty Senate, 1986, 87
Member,	USC Faculty Senate, 1988, 1989, 1990,1991
Representative,	USC Committee on UG Retention, 1991
Representative,	USC Symposium on Diversity, the Curriculum, and the Classroom, 1991
Member,	Committee on Inclusiveness, 93-94
Reviewer,	USC Draft Document for Student Disability, 1993

SERVICE TO PROFESSION

Current Activities

Editorial Board of the Journal of *Safety Science.* Elsevier Science Publishers, (1986-2004)
Review Board, the Robotics Industries Association (RIA) and the American National Standards (ANSI) for Safety of Industrial Robots and Robotic Systems (ANSI/RIA R15.06), since 1991.
Member, Technical Review Board, Facilities and Safety Standard Committee, Semiconductor Equipment Manufacturers International (SEMI), since 1994.
Member, Scientific Paper Review Panel, International Conference on Engineering Design and Automation, since 1998.
Reviewer, *IEEE Intelligent Transportation Systems* (June 99).
Reviewer, *Journal of Intelligent Transportation Systems* (June 2000).
Reviewer, *Encyclopedia of Human Factors and Ergonomics for the Internet*, Oct. 2002.
Reviewer, NSF DMII Program, March 2003, Oct. 04.
Reviewer, IEEE SMC manuscript, March 2003, August 04, June 05.
Reviewer, NSF Design, Manufacture, and Industrial Innovation program, Oct. 2005.
Reviewer, *Human Factors in Manufacturing*, May 2005.
Reviewer, Encyclopedia of Human Factors and Ergonomics for Internet, March 2005.
Reviewer, Metrans (USC/CSULB), December 2005.
Reviewer, EPA, Science To Achieve Results (STAR) program, July 2006.
Reviewer, International Journal of Production Economics, August 2006.
Reviewer, ASEE Conference, Pittsburg, Pa. Reviewed two papers in January, 2008.
Reviewer, NSF Program on Post Doc Fellowship, Feb., 2008.
Reviewer, Journal of Industrial Ecology, May, 2008.
Presenter, Executive Education Seminar, Waste Management, Inc., January 2008.
Presenter, Rotary Club of Rancho Palos Verdes, Ca, April 21 2009. Gained approval for $10,000 grant to EWB-USC.
Discussant, Port Project Mixer, POLA, Ca, August 11, 2009.
Member, Faculty Leadership Council, Engineers Without Borders, USA, (June 2010).
Reviewer, Metropolitan Transportation Research Center, August 2011.
Reviewer, NSF Partnership for International Research and Education program, June, 2012.
Member, International Program Committee (IPC), International Conference on Low-carbon Transportation and Logistics, and Green Buildings (LTLGB 2012, Beijing, China), August 2012.
Reviewer, International Journal of Sustainable Transportation, August, 2012.
Member of Technical Committee, *IEEE Systems Man and Cybernetics*, Human-Machine Systems Division, Human-Computer Interaction Technical Committee, since Nov. 2002.
Advising Member, International Standards Organization TC159/SC4/WG9 Tactile/haptic interactions, Guidance on Gesture Interactions and Interfaces (G2I2), 2013-2014.
Member of Technical Program Committee, 4th International Symposium on Engineering Systems, Council of Engineering Systems Universities, New York, N.Y., 2014.
Reviewer, HCI International 2014 for the track "Experience Design for Behavior Change", Crete, Greece, June 2014 (reviewed 13 papers).
Member, American National Institute / Robotics Industries Association Standards 15.06, Subcommittee on Safety, 2014.
Member, Scientific Advisory Committee, Global Conference on Health Systems Engineering, Istanbul, Turkey, (August 2014).
Member, Editorial Board, Journal of *Industrial Engineering and Management*, OMICS Publishing Group, (2014).
Member, Editorial Board, Greener Journal of Science, Engineering and Technology Research an online e-journal.
Reviewer, International Conference on Intelligent Environments (IE 2015), IEEE, Systems Man and Cybernetics, Prague, Czech Republic.
Member, Technical Committee, IEEE Systems Man Cybernetics, Human Computer Interaction, 2015.
Member, Review Committee, ACM SUI '15: Symposium on Spatial User Interaction, Los Angeles, CA, 2015.

Reviewer, Journal of Human Factors in Manufacturing and Service, 3 papers throughout 2015.
Founding Reviewer for Approval, R15.06 subcommittee, Robotics Industries Association, *RIA TR 306 Risk Assessment 201X Draft 1 05f* is approved for publication as an ANSI-registered Technical Report, 2016.
Reviewer, Journal of Human Factors in Manufacturing and Service, 2 papers in 2016.
Program Committee Member, 12th International Conference on Intelligent Environments (IE 16), London, UK.
Committee Member, APSIH election committee for 2017.

Past Activities

Safety Technical Interest Group, the Human Factors and Ergonomics Society, (1985–97).
Reviewer, National Science Foundation, The Program on Manufacturing Automation and Systems Integration, Dec. 1986.
Editor, Special Issue on Safety of Robotics and Automated Manufacturing Systems, the *Journal of Occupational Accidents*, Amsterdam, Netherlands: Elsevier Science Publishers, 1986.
NIOSH Site Visitor: "Ergonomics Education for Union Health Professionals," April, 1987.
Reviewer for "Sensors for Safety," a chapter in Richard C. Dorf (Ed.), *International Encyclopedia of Robotics: Applications and Automation*, John Wiley and Sons, 1988 (reviewed in 1987).
Reviewer for the NIOSH Technical Report: *Safe Maintenance Guide for Robotic Workstations.* U.S. Department of Health and Human Services, March 1988 (reviewed in Sept. 1987).
Reviewer for 14 papers submitted to the International Industrial Ergonomics and Safety Conference (1987).
Reviewer, *International Journal of Computers and Industrial Engineering*. Articles: "Toward Office Automation" (reviewed in 1987).
Reviewer, *International Journal of Industrial Ergonomics*. Book: *Individual Behavior in the Control of Danger,* by Hale and Glendon, Amsterdam, The Netherlands: Elsevier, 1987 (reviewed in 1988).
Member, Scientific Advisory Board, The First International Conference on Ergonomics of Advanced Manufacturing and Hybrid Automated Systems, Louisville, KY, August, 1988. Also organized and chaired a session on Robotics Safety.
Member, Scientific Advisory Board, Annual International Industrial Ergonomics and Safety Conference, Cincinnati, OH, June, 1989.
Book reviewer*, Human Factors Bulletin*. Book: *Occupational Health and Safety in Automation and Robotics*, K. Noro, (Ed.), London, UK: Taylor and Francis, 1987 (reviewed in 1988).
Canvassee Review Board, the Robotics Industries Association (RIA) and the American National Standards (ANSI): Human Engineering Design Criteria for Hand Held Robot Control Pendants (ANSI/RIA R15.02–199x).
Reviewer, *International Journal of Industrial Ergonomics*. Special Issue on safety of traditional and modern manufacturing systems (1990).
Chair, Conference Technical Programs, (130 paper reviews and presentations), The Second International Conference on Human Aspects/Ergonomics of Advanced Manufacturing and Hybrid Automated Systems, Honolulu, HI, August, 1990.
Reviewer, *International Journal of Human Factors in Manufacturing*. Articles: 1. "Implementations of Advanced Manufacturing Technologies" (reviewed in March, 1990), 2. "Task and reliability analysis of lathe operation" (reviewed in September 1991),
Reviewer, Journal of *Human Factors* , Vol. 32, No. 4, 1990, Special Issue: Assisting People with functional impairments, (reviewed four papers for this issue).
Reviewer, Van Nostrand Reinhold Publishing Co. for books in the area of Industrial Safety (1990-1991).
Reviewer, Journal of *Earthquake Spectra*, August, 94.
Book Review Editor, *International Journal of Human Factors in Manufacturing*, John Wiley, 1990-91.
Member, Technical Program Committee, The International Emergency Management and Engineering Conference, Sophia Antapolis, France, May 9-12, 1995.
Member, Technical Program committee, Human Aspects of Advanced Manufacturing and Hybrid Automation, Maui, Hawaii, August 7-10, 1996.
Member, Advisory and Review Panel, *Fifth International Conference on Human Aspects of Advanced Manufacturing: Agility and Hybrid Automation.* Reviewed 12 papers in Safety Engineering and Product Design, August, 1997.

PROFESSIONAL ORGANIZATION MEMBERSHIP

Current Membership
International Society for Industrial Ecology (since 2003)
Institute of Industrial Engineers (Senior member, since 1983; Professional Relations Chairperson, Wichita Chapter, 1983; Member, Construction Committee, 2004)
Human Factors and Ergonomics Society (Los Angeles Chapter) (Member, since 1999)
Engineers Without Borders – USA (Member of the Faculty Leadership Council, since 2010)
Member, APSIH election committee for 2016-2017.

Past Membership
Society for Engineering and Management Systems (Member, 97-00)
The Society for Work Science (Member, 1997-00)
New York Academy of Sciences (Member, 1997)
American Society of Safety Engineers (Faculty Advisor for the Los Angeles Student Chapter, 1985 –1997
Member, Los Angeles Chapter, 1985-present; Member, Los Angeles Chapter Scholarship Committee, 1987)
Human Factors and Ergonomics Society
Member of committee on Industrial Automation, 1986
Member of Technical Standards Committee on Robotics and Automated Systems, 1986
Member of Aging Program Committee, 1985
Member of Rehabilitation Program Sub-Committee, 1985
Member of Safety Program Committee, 1986
Technical Program Chair, Safety Technical Group, 1987
Member Safety Program Committee, 1988
Member of Arnold Small Lecture Series, 1989
Canvassee, Technical Advisory Group, 1989
Liaison, Position Paper Review for American Society of Safety Engineers (1992 Summit in Washington D.C.)
System Safety Society
Member, 1985–1990
International Foundation for Industrial Ergonomics and Safety
Member, 1987–89
Robotics International/Society of Manufacturing Engineers
Member, Division of Human Factors and Safety, 1986–88
American Industrial Hygiene Association
Member, 1985–86, 1994-1997
American Society of Engineering Education
Member of Advisory Committee and Session Chair, 1984 Mid-Western Conference, Wichita, KS.
Alpha Pi Mu (Industrial Engineering Honor Society)
Faculty Advisor, 1982–1985
Earthquake Engineering Research Institute
Member, 1991-94
Natural Hazards Society
Member, 1990-92
National Robot Service Association
Member, 1989-91

CONSULTING

National Institute for Occupational Safety and Health (NIOSH): "Safety Principles for an Evolving Technology: The Programmable Industrial Automation," NIOSH Division of Safety Research, Morgantown, WV, May, 1986.

National Institute for Occupational Safety and Health (NIOSH): "Supervisor Awareness May Prevent Robot-Related Fatalities," NIOSH Division of Safety Research, Morgantown, WV, September, 1988.

State of California, Peace Officers Standards and Training, Designed and taught training course in "Emerging Trends in Advanced Technologies," Pomona, CA, July, 1987.
Expert Witness: Product Liability, Personal Injury, Safety Training.
National Institute for Occupational Safety and Health (NIOSH): "A Roundtable for Injury Prevention of Industrial Machinery". Division of Safety Research, Morgantown, WV, August, 1989.
National Science Foundation: A video tape production called "Effects of Earthquakes on Building Contents: A Visual Experience", 8 minutes, 1991 (copyright: University of Southern California).
Price & Associates: consulted for functional competence of California State Licensing Examination in Safety Engineering, May, 1991.
Kazarians and Associates: A proposal on "A quantitative safety analysis of Automated Highway Systems", 1998.
Member, Technical Advisory Board, TSS Wireless, Inc., Los Angeles, Ca, since 2000.
Coalition to Save the Marina: prepared a document protecting view corridors in Marina, 2007 (pro bono).

PROFESSIONAL IMPROVEMENT

Attended Viterbi-Gerontology retreat, April 9, 2013
Attended Metrans Seminars throughout 2012-13
Attended all Environmental Sustainability Research Network day long retreats. In one of the sessions, Jae Kim, presented our research poster and won the second prize.
Attended a day-long event from USC Teaching with Technology Conference, May 6, 2013.
Attended a day-long event from the Environmental Sustainability Research Network called "Conservation Psychology," May 8, 2013.
Attended a session on our MS degree in Green Technologies, May 10, 2013.
Attended one of the Health Systems Improvement Collaborative day long sessions, May 15, 2013.
Attended a session on "Improve your Teaching Effectiveness," organized by CET and Viterbi DEE, Jan. 24, 2014.
Attended all Metrans presentations, 2014.

HONORS AND AWARDS

Listed in the *Outstanding Young Men of America*, 1984
Listed in the *Who's Who in the West*, 23rd Edition, Marquis Publications, 1991
Recipient of the First Annual USC Faculty & Student Research Award, Phi Kappa Phi National Honor Society, 1992
Elected to the New York Academy of Sciences, 1997
Outstanding Teacher of Year Award, Daniel J. Epstein Dept. of Industrial and Systems Engineering, 2003-04
Best Paper Award from the College of Business and Economics, CSU Northridge, 2009.

PROFESSIONAL REGISTRATION

- Registered Professional Engineer (PE), State of California, License No. SF003312 (until 1997).
- Certified Safety Professional (CSP), Certification No. 11333 (until 1997).