Biographical Sketch
Sahra Sedigh Sarvestani

(a) Professional Preparation

Sharif University of Technology, Tehran, Iran
B.S., Electrical Engineering, 1995
Purdue University, West Lafayette, IN
M.S., Electrical and Computer Engineering, 1998
Ph.D., Electrical and Computer Engineering, 2003

(b) Appointments

Missouri University of Science & Technology (formerly University of Missouri-Rolla)
Associate/Asst Professor, Dept. of Electrical and Computer Engineering, Aug. 2004-present.
Associate/Assistant Professor, Dept. of Computer Science (courtesy), Aug. 2009-present.
Research Investigator, Intelligent Systems Center, Aug. 2008-present.
Lecturer, Dept. of Electrical and Computer Engineering, Aug. 2003-Aug. 2004.

Purdue University, School of Electrical and Computer Engineering
Graduate Instructor, June 2002-May 2003.
Graduate Research Assistant, Aug. 1996-Dec. 2003.
Graduate Teaching Coordinator, Aug. 1997-Aug. 2000.

Cisco Systems, San Jose, CA.
Graduate Research Intern, High Availability Group, Aug. 1997-May 2000.

(c) Products

1. V. Winter, B. Cukic, T. Khoshgoftaar, K. Mori, R. Paul, C. Peréz-Leguízamo, S. Sedigh, J. Sloan, M. Vouk, and I. Yen. High consequence systems: State of the art and practice. *Int'l. Journal of Reliability, Quality and Safety Engineering*, 2014, to appear.
2. K. Marashi and S. Sedigh, "Towards Comprehensive Modeling of Reliability for Smart Grids: Requirements and Challenges," In *Proc. of the 15th IEEE Int'l Symposium on High- Assurance Systems Engineering (HASE)*, Miami, FL, Jan. 2014.
3. K. Marashi, M. Woodard, S. Sedigh, and A. Hurson. Quantitative reliability analysis for intelligent water distribution networks. In *Proc. of the Embedded Topical Meeting on Risk Management for Complex Socio-Technical Systems (RM4CSS), Annual Meeting of the American Nuclear Society*, Washington, D.C., Nov. 2013.
4. Mark Woodard and Sahra Sedigh. Modeling of autonomous vehicle operation in intelligent transportation systems. In Anatoliy Gorbenko, Alexander Romanovsky, and Vyacheslav Kharchenko, editors, *Software Engineering for Resilient Systems*, volume 8166 of *Lecture Notes in Computer Science*, pages 133-140. Springer Berlin Heidelberg, Oct. 2013.
5. J. Lin, S. Sedigh, and A. R. Hurson. Knowledge management for fault-tolerant water distribution. In Albert Zomaya and Hamid Sarbazi-Azad, editors, *Large Scale Network-Centric Computing Systems*. John Wiley & Sons, 2012.

6. J. Lin and S. Sedigh. Reliability modeling for intelligent water distribution networks. *Int'l. Journal of Performability Engineering, Special issue on Performance and Dependability Modeling of Dynamic Systems*, 7(5):467-478, Sept. 2011.

7. E. Jean, S. Sedigh, A. R. Hurson, and B. Shirazi. Tools and techniques for interoperability and dynamic reconfiguration of pervasive systems. In M. Denko and M. S. Obaidat, editors, *Pervasive Computing and Networking*. John Wiley & Sons, 2011.

8. A. Faza, S. Sedigh, and B. McMillin. Integrated cyber-physical fault injection for reliability analysis of the smart grid. In *Proc. of the 29th Int'l. Conf. on Computer Safety, Reliability and Security (SAFECOMP '10),* pages 277-290, Vienna, Austria, Sept. 2010.

9. J. Lin, S. Sedigh, and A. R. Hurson. Ontologies and decision support for failure mitigation in intelligent water distribution networks. In *Proc. of the 45th Hawaii Int'l. Conf. on System Sciences (HICSS-45),* Maui, USA, Jan. 2012.

10. A. Faza, S. Sedigh, and B. McMillin. Reliability analysis for the advanced electric power grid: from cyber control and communication to physical manifestations of failure. In Proc. of SAFECOMP '09, Hamburg, Germany, Sept. 2009, winner of best paper award.

(d) Synergistic Activities

1. Member of S&T Task Force for Female Faculty Recruitment and Retention, 1/2007 -present.
2. Invited lecture on Randomized Timed and Hybrid Models for Critical Infrastructures, Jan. 2014.
3. Invited lecture titled "Towards assurance of dependability for critical infrastructure systems," NSF Workshop on Cooperative Autonomous Resilient Defense in Cyberspace, Jan. 2011.
4. Program and Track Chair service to international conferences and symposia: Program Co-Chair of IEEE Int'l. Computer Software and Applications Conf. (COMPSAC), 2013; Program Chair of the Int'l. Conf. on Computers and Their Applications (CATA), 2012; Track Chair of COMPSAC, 2008, 2011, 2012, 2014; Program Chair of IEEE Int'l. High Assurance Systems Engineering Symposium (HASE), 2010; Publications Chair of IEEE Int'l. Conf. on Intelligent Transportation Systems (ITSC), 2009, 2010; Founding Doctoral Symp. Chair of COMPSAC, 2006.
5. Program committee membership of international conferences and symposia: IEEE Int'l. Conf. on Software Security and Reliability (SERE), 2012-2014; Int'l. Conf. on Computer Safety, Reliability and Security (SAFECOMP), 2012; IEEE Int'l. Conf. on Software Engineering and Knowledge Engineering (SEKE), 2011; IEEE HASE, 2011- 2014; Int'l. Symp. on Software Reliability Engineering (ISSRE), 2011-2012; IEEE COMPSAC 2005-2014.

(e) Collaborators & Other Affiliations

Collaborators and Co-Editors (external to Missouri S&T): F. Bastianini (Metalmobile), R. Collins (Penn State), E. Jean (Penn State), A. Küpper (TU Berlin), L. Miller (Iowa State), H. Ohsaki (Kwansei Gakuin University), B. Shirazi (Washington State), J. Sutherland (Carollo Engineers), K. Trivedi (Duke University), V. Winter (U. of Nebraska-Omaha).

Graduate Advisors and Postdoctoral Sponsors:
A. Ghafoor, M.S.E.E. and Ph.D. advisor, Purdue University.

Thesis Advisor and Postgraduate Scholar Sponsor:
PhD: A. Faza, J. Lin, N. Jarus, P. Maheshwari, K. Marashi, C. Wagner, M. Woodard, and S. White.
MS: M. Al-Basrawi, V. Arun, A. Faza, T. Freiberger, T. Harms, K. Joshi, J. Koch, S. Kunchum, A. Sabatini , V. Plessi, and P. Shah.
Postgraduate-Scholar Sponsored: A. Demirkol.
Total graduate students: 19; Total postgraduate scholars: 1.