Dr. Naeini joined the Electrical Engineering Department at University of South Florida as an Assistant Professor in 2017. Before joining University of South Florida, she was an Assistant Professor in the Department of Computer Science at Texas Tech University from 2014 to 2017. She received her Ph.D. in Electrical and Computer Engineering as well as a PhD minor in Mathematics from University of New Mexico, Albuquerque, NM, USA in 2014. Prior to that, she received her M.Sc. in Computer Engineering from Amirkabir University of Technology, Tehran, Iran in 2009 and her B.Sc. in Computer Engineering from Sharif University of Technology, Tehran, Iran in 2007.

Dr. Naeini is the Associate Editor of IEEE Communication Letters since 2014. Moreover, she has been serving as the technical reviewer for various conferences and journals in the area of communication systems, reliability and smart grids including IEEE Transactions on Communications, IEEE Transactions on Smart Grid, IEEE Transactions on Reliability, IEEE Transactions on Parallel and Distributed Systems, and Nature-Scientific Reports. Dr. Naeini received Texas Tech University Alumni Association New Faculty Award in 2017 for excellence in teaching, research, and outreach.

Research Interests

Dr. Naeini's research interests include leveraging stochastic modeling, machine learning, network analytics and network science to integrate security and reliability measures as well as socio-behavioral models into the design and control of cyber-physical-human (CPH) systems. She applies these techniques to various CPH systems with a focus on Smart Grid, Smart Home, Transportation System, and Smart City. Her focus is on reliability, security, and performance evaluation of these systems. She is also interested in enhancing security and reliability of communication networks, such as Software Defined Networking (SDN)-based systems, particularly in CPH environments using machine learning and network analytics techniques.

Recent Publications

- U. Nakarmi and M. Rahnamay-Naeini, "Towards Integrated Infrastructures for Smart City Services: A Story of Traffic and Energy Aware Pricing Policy for Charging Infrastructures," 6th International Conference on Smart Cities and Green ICT Systems, SmartGreens 2017.
- E. Siavashi and M. Rahnamay-Naeini, "The Dynamic, Constraint-based Influence Model and its Application in Stochastic Modeling of Load Balancing in Computing Networks," to appear in International Journal of Network Science, 2017.
- M. Rahnamay-Naeini and M. Hayat, "Cascading Failures in Interdependent Infrastructures: An Interdependent Markov-Chain Approach," IEEE Transactions on Smart Grid, vol. 7, no. 4, pp. 1997-2006, July 2016.
- M. Rahnamay-Naeini and M. Hayat, "Impacts of Operating Characteristics on Sensitivity of Power Grids to Cascading Failures," IEEE PES General Meeting, 2016.
- M. Rahnamay-Naeini, Z. Wang, N.Ghani, A. Mammoli , and M. Hayat, "Stochastic Analysis of Cascading-Failure Dynamics in Power Grids," IEEE Transactions on Power Systems, vol.29, no.4, pp.1767-1779, July 2014.