

Graduate Seminar (EEL 6936) Department of Electrical Engineering <u>http://ee.eng.usf.edu/Grad_Seminar</u>

Prof. Sriram Chellappan, Associate Professor Computer Science and Engineering Department University of South Florida, Tampa, FL

Friday, September 29, 2017, 3:00 p.m. - 4:00 p.m. College of engineering (ENB) Room 118

Human Centered Designs for Cyber Security

Abstract

The issue of keeping humans in the loop during design and deployment of cyber authentication solutions is becoming important. In this talk, we present recent advances in this realm. In the first part of the talk, we will focus on authentication designs that address multiple trade-offs like strong security, user-friendliness, and ease of practical usage. Our technique relies on a novel concept called Predicates, which are used to share secrets between users and the server, while these Predicates are subsequently used for password generation during authentication in a challenge-response mechanism. In the second part of the talk, we will present recent results in behavior-based human authentication, which is a novel idea for authentication via anomalies detection.



Biography

Dr. Sriram Chellappan is an Associate Professor in the Department of Computer Science and Engineering at University of South Florida, where he directs the SCoRe (Social Computing Research) Lab. His primary interests lie in many aspects of how society and technology interact with each other, particularly within the realms of smart health and cybersecurity. He is also interested in mobile and wireless networking, cyber-physical systems, distributed and cloud computing. His research has been supported by grants from National Science Foundation, Department of Education, Army Research

Office, National Security Agency, DARPA and Missouri Research Board. Prior to this appointment, he was an Associate Professor in Computer Science at Missouri University of Science and Technology. He received the Ph.D. degree in Computer Science and Engineering from The Ohio-State University in 2007. He is a recipient of the NSF CAREER Award in 2013, the Missouri S&T Faculty Excellence Award in 2014, the Missouri S&T Outstanding Teaching Commendation Award in 2014, and the Missouri S&T Faculty Research Award in 2015.