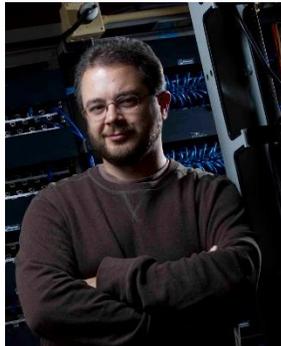




ERIK JONSSON SCHOOL OF ENGINEERING & COMPUTER SCIENCE AT THE UNIVERSITY OF TEXAS AT DALLAS

2018 Spring Distinguished Lecture Series



Benefits and Risks of Sensing for Cyber-Physical Security

Patrick Tague, Associate Research Professor

**Electrical and Computer Engineering Department and Information
Networking Institute**

Carnegie Mellon University, Silicon Valley

**Wednesday, February 28th at 2pm
Osborne Conference Room, ECSS 3.503**

Abstract: The Internet of Things represents a step in the direction of allowing distributed groups of embedded devices to act like components in a biological system, providing sensory inputs, actuating in response to neural commands, and interacting with the physical world. While IoT and cyber-physical systems enable a wealth of exciting applications, the physical world likes to present problems that traditional approaches to security and privacy do not handle very well. This talk will focus on the role of sensor data in providing security and privacy protections for IoT/CPS scenarios as well as introducing new attack scenarios based on the similar sensor data. In particular, we'll highlight three of our recent projects on applying sensor data for defense and attack scenarios using specific examples related to smart homes and semi-autonomous vehicles.

Bio: Patrick Tague is an Associate Research Professor at Carnegie Mellon University with appointments in the Electrical and Computer Engineering Department and the Information Networking Institute, and he is also the Associate Director of the INI. Patrick leads the Mobile, Embedded, and Wireless Security group at the Silicon Valley Campus of CMU, and the group is affiliated with CMU CyLab. Patrick's research interests include wireless communications and networking; wireless/mobile security and privacy; robust and resilient networked systems; and analysis and sense-making of sensor network data. He received PhD and MS degrees in Electrical Engineering from the University of Washington as a member of the Network Security Lab and BS degrees in Mathematics and Computer Engineering from the University of Minnesota. He received the NSF CAREER award in 2012. In his free time, Patrick is a homebrewer, Lego builder, woodworker, and backpacker.

Refreshments at 1:45pm