

UNIVERSITY OF SOUTH FLORIDA

Major Research Area Paper Presentation

A First Step Towards Understanding Real-world Attacks on IoT Devices

by

Armin Ziaie Tabari

For the Ph.D. degree in Computer Science & Engineering

With the rapid growth of Internet of Things (IoT) devices, it is imperative to proactively understand the real-world cybersecurity threats posed to them. In this presentation I'll describe our initial efforts towards building a honeypot ecosystem as a means to gathering and analyzing real attack data against IoT devices. A primary condition for a honeypot to yield useful insights is to let attackers believe they are real systems used by humans and organizations. IoT devices pose unique challenges in this respect, due to the large variety of device types and the physical-connectedness nature. We thus create a multiphased approach in building a honeypot ecosystem, where researchers can gradually increase a low-interaction honeypot's sophistication in emulating an IoT device by observing real-world attackers' behaviors.

Friday, Aug 30, 2019

3:00 PM

ENB 109

THE PUBLIC IS INVITED

Examining Committee

Xinming (Simon) Ou, Ph.D., Major Professor

Jarred Ligatti, Ph.D.

Mehran Mozaffari Kermani, Ph.D.

Nasir Ghani, Ph.D.

Raj Rajagopalan, Ph.D.

Yu Sun Ph.D.,
Graduate Program Director
Computer Science and Engineering
College of Engineering

Sudeep Sarkar, Ph.D.,
Department Chair
Computer Science and Engineering
College of Engineering

Disability Accommodations:

*If you require a reasonable accommodation to participate, please contact the
Office of Diversity & Equal Opportunity at 813-974-4373 at least five (5) working days prior to the event.*