Industrial Control System Security (ICSS) Workshop
In conjunction with the Annual Computer Security Applications Conference

Tuesday, 6 December 2022
8:30 a.m. – 5:00 p.m.

Agenda:

8:30  Welcome and Introduction, Harvey Rubinovitz, The MITRE Corporation; Stacy Prowell, Oak Ridge National Laboratory; Irfan Ahmed, Virginia Commonwealth University; Constantinos Kolias, University of Idaho

8:50  “Keynote Presentation: Resilient Control Systems and the Advancement of the Cyber Feedback Loop”, Craig G. Rieger, Idaho National Laboratory

10:00 Break (20 minutes)

10:20  Formal Verification of the WirelessHART Protocol - Verifying Old and Finding New Attacks, Martin Gunnarsson, RISE Research Institutes of Sweden AB

10:55  Cybersecurity in the Smart Grid: Practitioners’ Perspective, Jacqueline Meyer, and Giovanni Apruzzese, University of Liechtenstein

11:30  Power-based Malware Detection in Linux Boot, Ge Li, Alexander Cathis, Shijia Wei, Mohit Tiwar, Andreas Gerstlauer, and Michael Orshansky, The University of Texas at Austin; Andrew Lu, Liberal Arts and Science Academy; Ross Brown, and Alexander Liu, Applied Research Laboratory, The University of Texas at Austin

12:05  Lunch (1 Hour and 25 minutes)

1:30  “Keynote Presentation: Secure Manufacturing and Supply Chain Networks”, Gabriela Ciocarlie, University of Texas San Antonio

2:30  Device-Centric Ransomware Detection using Machine Learning-Based Memory Forensics for Smart Inverters, Alycia Jenkins, Bohyun Ahn, Alve Rahman Akash, and Taesic Kim, Texas A&M University

3:05  Break (25 minutes)

3:30  “Invited Presentation: BLOC: A Game-Theoretic Approach to Orchestrate CPS with Check Blocks against Cyber Attacks”, Mina Guirguis, Texas State University

4:15  “Invited Presentation: How are PLCs Insecure by Design? A story of Experiments and Experiences on Real-world PLCs”, Irfan Ahmed, Virginia Commonwealth University

5:00  Discussion Period and Wrap-up, Summary and Topics for Next Year, Harvey Rubinovitz, The MITRE Corporation; Stacy Prowell, Oak Ridge National Laboratory; Irfan Ahmed, Virginia Commonwealth University; Constantinos Kolias, University of Idaho