

CYBER CITY: A PLATFORM FOR RESEARCHING CRITICAL INFRASTRUCTURE RESILIENCE

TUESDAY: SESSION 1, TRACK 3

SESSION CHAIRS/PRESENTER

Candice Mitchell, US Army Corps of Engineers – Engineer Research and Development Center

SESSION ABSTRACT

Cyber City is a unified research environment that promotes cybersecurity for critical infrastructure resilience, particularly around industrial control systems (ICS)/supervisory control and data acquisition (SCADA). It is an environment where researchers can address the special needs of Operation Technology (OT). The primary goals of Cyber City are fidelity and scale, where researchers can recreate facilities' network in a safe environment to perform assessments and research techniques for securing these environments. Cyber City will create a platform for sharing ideas to improve research as well as a space for those involved in OT to receive virtualized training. Current capabilities include an Open Stack environment utilizing Ansible and Terraform, which gives us the ability to quickly set up or tear down a network, allowing for invasive assessments. Cyber City has virtual models of some critical infrastructure and is developing further models alongside academic partners. Future plans include integrating hardware-in-the-loop on the virtual networks as well as creating physical models.