

Cyber Resilient EV Charging Station & Critical Infrastructure Workshop



Photo: Workshop in-person attendance for the event

The University of Memphis Center for Information Assurance (CfIA) in conjunction with the Computer Science and Electrical/Computer Engineering Departments hosted the Cyber Resilient EV Charging Station and Critical Infrastructure Workshop. The event was hosted in a hybrid format and had thirty (30) in-person and seven (7) virtual attendees. It was held in the Engineering Auditorium of the Herff College of Engineering on Friday August 25, 2023, from 9am to 5pm CST.

The workshop started with a welcome from both Dr. Okenwa Okoli, Dean of the Herff College of Engineering (CoE), and Dr. Stephanie Ivey, Herff CoE Associate Dean for Research. It featured presentations from several noteworthy speakers. Ryan Stanton, Tennessee Valley Authority (TVA), set the tone for the event with his presentation on the "Valley-wide Perspective on Electric Vehicles." Other noteworthy visiting speakers were Dr. Prasad P. Calyam, University of Missouri-Columbia, who presented "A Case for Low Overhead Zero Trust to Protect Critical Edge Infrastructures" and Dr. Anurag K. Srivastava, West Virginia University, who presented on "Enabling Secure and Resilient Cyber-Power Critical Infrastructure." Additionally, Dr. Mohammad Ashiqur Rahman, Florida International University, presented "Artificial Intelligence-Driven Control-Aware Attack-Resiliency Analytics for Cyber-Physical Systems."

University of Memphis faculty members also presented during the workshop. Dr. Mohd Hasan Ali presented on "Cyber Resilient Electric Vehicle Charging Infrastructure" and Dr. Myounggyu Won made a presentation entitled "Intelligent Adaptive Electric Vehicle Motion Control for Dynamic Wireless Charging."

Finally, University of Memphis graduate students provided update presentations on the status of their research projects. Nathan Farrar's presentation was on "Dynamic Wireless Charging: Cyber Security and the Future of EV Charging" whereas Elijah Durkee made presentation on "Cyber Resilient 5G-Enabled Electric Vehicle Charging Station" on behalf of his research group. Additionally, graduate student Sagar Pathak and staff member Jack O'Meara made a presentation on the National Cybersecurity Preparedness Consortium activities at the University of Memphis.

Dr. David Russomanno, Executive Vice President for Academic Affairs & Provost, and Dr. Dipankar Dasgupta made closing remarks for the event.