



CAE Forum



Wednesday, May 4, 2022

Building a Smart Secure Manufacturing Testbed Using Zero Trust Model, Machine Learning and 5G (1:00 – 3:00 pm EST)

Mark your calendar and come join us for CAE Forum! CAE Forum is a live, real-time, online, academic forum where members of the CAE community give non-technical presentations on topics of value to the CAE community. CAE Forum is about sharing your ideas, knowledge, and expertise to empower and strengthen our community. It's that simple. CAE Forum presentations are normally held on the third Wednesday of each month during the Fall and Spring semesters.

PRESENTATION #1

Title/Topic: Building a Smart Secure Manufacturing Testbed Using Zero Trust Model, Machine Learning and 5G

Time: 1:00 – 3:00 pm EST

Location: <https://caecommunity.zoom.us/my/caeforum>

Just log in as "Guest" and enter your name. No password required.

Audience: Students, Professors, Govt.

Presenter(s): Holly Yuan — University of Wisconsin-Stout

Brandon Cross—Faculty Advisor

Dr. Shi Wei—Faculty Advisor

Aaron Bialzik—Advisor, Manufacturing Outreach Center Director

Wesley Larrabee (Computer Engineering Research Student) - Team Lead/Hardware Engineer

Michael Laffin (Computer Engineering Research Student) - AI Engineer

Neil Borden (Computer Networking & IT Research Student) - Security Engineer

Scott Bresnahan (Computer Networking & IT Research Student) - Cloud Engineer

Lee Kottke (Computer Networking & IT Research Student) – Cloud Engineer

Description: Manufacturing is not only the backbone of U.S. military technical advantage, but also a major contributor to the U.S. economy. A healthy, innovative, and vibrant manufacturing sector is essential to the economic strength and national security of the United States. The Industrial IoT, coupled with 5G, security in IIoT, machine learning and artificial intelligence, is impacting the future and growth of manufacturing. In this tech talk, we will discuss and live-demo how we use zero trust model, machine learning, and 5G to design and implement a secure smart manufacturing testbed in a lab environment. Further discussion also includes how we collaborate with the manufacturing outreach center to engage local manufacturers and show business use cases that smart factory can drive value.

A recording of the live presentation will be available following the pre of the presentation at:

<https://www.caecommunity.org/resources/cae-forum-resources>

Contact us at: caeforum@caecommunity.org