JOINT TRAN-SET WEBINAR SERIES

Tran-SET

RUTGERS
Center for Advanced Infrastructure and Transportation

Innovative Technology, Techniques, and Processes in Transportation Infrastructure Inspection

Thursday, June 27, 2019 | 2:00 – 3:45 PM (EST)

Free registration: https://bit.ly/2I4GorL

Development, Training, Education, and Implementation of Low-cost Sensing Technologies for Bridge Structural Health Monitoring (SHM)

This presentation will describe the development and validation of cost-effective new sensing technologies (Arduino, wireless smart sensors, drones, Hololens) and their promotion in the workforce with an emphasis on outreach to high-school students.

Dr. Fernando Moreu
University of New Mexico

Augmented Reality in Life-Cycle Management of Transportation Infrastructure Projects

In recent years, VR/AR as an immersive computing and visualization technology has seen explosive development, and have rich use cases in the realm of transportation infrastructure management. In this presentation, I will give an overview of the development and applications of VR/AR technologies in three use cases for critical facility management, bridge related work planning, and indoor navigation of transportation facilities.

Dr. Jie Gong
Rutgers University

Adaption of 3D Scanning Technology for High Precision Bridge Inspection

The presentation will review the requirements for the imaging technology, challenges when implementing 3-D scanning on a bridge, and best practices for addressing these challenges. Using a 3-D scanner for section loss assessment of corroded steel beams will be reviewed as a case study and opportunities for using the scanner for different aspects of an inspection will be noted.

Dr. Alexandra Hain
University of Connecticut

Dr. Arash Zaghi
University of Connecticut

Detection and Monitoring of Fatigue Damage in Steel using Vibro-Acoustic Modulation Method

This presentation will discuss new Vibro-Acoustic Modulation algorithms and procedures to detect and monitor fatigue damage initiation at early (pre-crack) stages.

Dr. Dimitri Donskoy
Stevens Institute of Technology

Dr. Giri Venkiteela
New Jersey DOT