

Innovative Technology, Techniques, and Processes in Transportation Infrastructure Inspection

- Thursday September 26th, 2019 | 1:30 – 3:15 PM (CST)
- **Free registration at:** <https://bit.ly/2Ud5VUk>
- **Information at:** <https://transet.lsu.edu/webinars/>

Infrastructure Inspection During and After Unexpected Events

The objective of this work is to develop an interactive physical-computer model for the structural health monitoring of highway bridges during extreme natural events such as earthquakes and flooding. The physical model, representing a highway bridge in Iowa, will provide the adequate measurements, a computer finite element model will update and predict the changes in the loading capacity of the bridge during and after the event, and a damage detection and health monitoring scheme will assess the integrity of the bridge.



[Dr. Salam Rahmatalla](#)
University of Iowa



[Dr. Fernando Moreu](#)
University of New Mexico

Augmented Reality Enhancing the Inspections of Transportation Infrastructure: Research, Education, and Industry Implementation

This presentation will describe the development of augmented reality software and hardware developments for transportation infrastructure inspections. The main content of the presentation will be based on the applications developed for quantifying the change of infrastructure across time and space.

Development and Implementation of a Moving Nondestructive Evaluation Platform for Bridge Deck Inspection

This presentation provides an overview of a moving platform that was developed to perform multiple nondestructive evaluation (NDE) tests for bridge deck evaluation. The platform will provide functions of data collection, storage, and positioning.



[Dr. Jinying Zhu](#)
University of Nebraska-Lincoln



[Dr. Ece Erdogan](#)
University of Nebraska-Lincoln

Continuous Long-Term Health Monitoring using Ultrasonic Wave Propagation

This presentation will describe a novel ultrasonic testing (UT) method used to monitor and diagnose problems with steel reinforcement, steel reinforcement-concrete interface, and concrete with a single approach. The method utilizes simple-to-interpret energy-based measurements and demonstrates the potential to examine large areas relative to most conventional NDE methods used for bridge decks.