Hyperspectral Imaging Analysis of Steel Corrosion

1:00

1:50-2:00

## INSPIRE UTC Graduate Poster Session Monday, August 3, 2020 1:00 p.m. – 2:00 p.m. (Central Standard Time)

<u>Presentation</u> <u>Student Presenter</u>

Welcome by Dr. Lesley Sneed, Professor, Civil, Architectural & Environmental Engineering, Missouri S&T and

**Graduate Student Poster Session Chair** 1:00-1:10 Integrated Sensing System of Fe-C Coated Long Period Fiber Chuanrui Guo Gratings for Mass Loss Measurement of Steel Bars with Strain Advisor: Dr. Genda Chen, Missouri S&T And Temperature Compensation 1:10-1:20 Simulation Training and Control System for Bridge Inspection Rahul Dubey Advisor: Dr. Sushil Louis, University of Nevada at Reno 1:20-1:30 UAV Aerodynamics Simulation: Model Building and Analysis Pu Jiao Advisor: Dr. Genda Chen, Missouri S&T Human Collaborative Haptic-based Mobile-Manipulating UAVs 1:30-1:40 **Dongbin Kim** Advisor: Dr. Paul Oh, University of Nevada-Las Vegas 1:40-1:50 A Hybrid-Climbing Robot for Steel Bridge Inspection Thanh Son Nguyen Advisor: Dr. Hung La, University of

Nevada at Reno

Abdullah Alhaj

Advisor: Dr. Genda Chen, Missouri S&T

## INSPIRE UTC Graduate Poster Session Tuesday, August 4, 2020 9:30 a.m. – 11:00 a.m. (Central Standard Time)

<u>Presentation</u> **Student Presenter** 9:30 Welcome by Dr. Lesley Sneed, Professor, Civil, Architectural & Environmental Engineering, Missouri S&T and **Graduate Student Poster Session Chair** 9:30-9:40 Clamping Design for Bridge Inspection Robot Deployment **Bo Shang** Systems (BIRDS) Prototype II Advisor: Dr. Genda Chen, Missouri S&T 9:40-9:50 Data-Driven Risk Assessment of Bridges Subject to Corrosion and Scour Yijian Zhang Advisor: Dr. Iris Tien, Georgia Institute of Technology Autonomous Ultrasonic Thickness Measurement of Steel Bridge 9:50-10:00 Yu Otsuki Members using Mobile Sensors Advisor: Dr. Yang Wang, Georgia Institute of Technology 10:00-10:10 Experimental Investigation of a Novel SMART Shear Key for Xinzhe Yuan Earthquake and Tsunami Mitigation Advisor: Dr. Genda Chen, Missouri S&T 10:10-10:20 Automatic Impact-Sounding Acoustic Inspection of Concrete Structure **Jinglun Feng** Advisor: Dr. Jizhong Xiao, City College of New York 10:20-10:30 Bridge Inspection Video Data Analysis for Data-Driven **Muhammad Monjurul Karim Asset Management** Advisor: Dr. Ruwen Qin, Missouri S&T 10:30-10:40 UAV-based Smart Rock Localization for Determination of **Haibin Zhang** Bridge Scour Depth Advisor: Dr. Genda Chen, Missouri S&T 10:40-10:50 Vision-based Non-GPS UAV Guidance for Bridge Inspection **Bo Shang** Advisor: Dr. Genda Chen, Missouri S&T 10:50-11:00 Closing Remarks and Winners Announced by INSPIRE UTC Graduate Student Poster Session Chair Dr.

Lesley Sneed, Professor, Civil, Architectural & Environmental Engineering, Missouri S&T