

TPW14-005

Sunday, January 12, 2014, 9:00 am to 12:00 pm (noon), Hilton, Columbia Hall 11, Washington D.C.

Sensing Technologies for Transportation Applications

Colin Brooks, Michigan Tech Research Institute (MTRI), presiding

Co-Sponsored by the Committee on Information Systems and Technology (ABJ50) and the Committee on Geographic Information Science and Applications (ABJ60)

This workshop continues a series of workshops on practical uses of sensing technologies for transportation planning, management, and operations. Included technologies are both remote sensing and in situ sensors. Technologies to be covered include both remote sensing and in-situ sensors. The workshop brings together researchers and practitioners to share the results of their efforts with a broader community and discuss future research needs and applications. Presentations will demonstrate the broader application of these developing tools.

Speakers, affiliations, talk titles, and co-authors:

1. Nigel Waters, George Mason University, nwaters@gmu.edu - "Assessing road infrastructure during emergencies through remote sensing and social media." Co-Authors: Guido Cervone, Emily Schnebele, Jeff Harrison. (P14-6187)
2. R. Andrew Swartz, Michigan Technological University, raswartz@mtu.edu - "Autonomous Scour Sensing for Bio-Inspired Magnetostrictive Flow Sensors." Co-Authors: Alison Flatau, Colin Brooks, Brian Barkdoll, Suok-Min Na, K. Arthur Endsley. (P14-6189)
3. Aditi Chattopadhyay, Arizona State University, aditi@asu.edu - "Multilevel Adaptive Remote Sensing Package for Bridge Scour Health Management." (P14-6191)
4. Colin Brooks, Michigan Tech Research Institute (MTRI), cnbrooks@mtu.edu - "Implementing Assessment of Unpaved Road Condition with High-Resolution Aerial Remote Sensing". Co-Authors: Richard Dobson, Chris Roussi, Tim Colling, David Dean, Melanie Kuiber. (P14-6192)
5. Jarlath O-Neil-Dunne, University of Vermont, Jarlath.ONeil-Dunne@uvm.edu - "Rapid Exploitation of Commercial Remotely Sensed Imagery for Disaster Response & Recovery". Co-Authors: Austin Troy, Jim Sullivan, Amanda Hanaway-Corrente, Sean MacFaden. (P14-6193)
6. Ashwin Yerasi, University of Colorado, ashwin.yerasi@colorado.edu - "Sensing Poor Highway Surface Conditions with High-Resolution Satellite Imagery". Co-Author: William Emery. (P14-6196)
7. Yuanchang Xie, University of Massachusetts Lowell, Yuanchang.Xie@uml.edu - "Automatic Track Inspection Using 3D Laser Profilers to Improve Rail Transit Asset Condition Assessment and State of Good Repair – A Preliminary Study." Co-Authors: Samy Metari, Mario Talbot, Kaiguang Zhao, John Laurent. (P14-6198)

8. Brian Bruckno, Virginia Department of Transportation, brian.bruckno@vdot.virginia.gov - "Application of Interferometric Synthetic Aperture Radar to sinkhole detection and rock slope monitoring." Co-Author: Edward Hoppe. (14-2178)
9. Sean Barbeau, University of South Florida, sjbarbeau@gmail.com - "Automatic Identification of Points of Interest in Global Navigation Satellite System Data: A Spatial Temporal Approach." Co-Author: Khoa Tran, Miguel Labrador. (P14-6199)
10. Srinivas Pulugurtha, The University of North Carolina at Charlotte, sspulugurtha@uncc.edu - "Travel time data collection and spatial information technologies for reliable transportation systems planning." Co-Author: Venkata Duddu. (P14-6326)

Session Type: Workshop (W)

Subject Areas: Data and Information Technology

Note: Each talk is 15 minutes in length.

Subcommittee webpage is located at: <http://www.abj50.org/subcommittees/sensing-technologies/>