INDUSTRY TECHNICAL WORKSHOP

The Internet of Things in Transportation and Logistics

Tuesday, October 27, 2015
2:00 p.m. to 4:30 p.m.

Hilton Orrington/Evanston Hotel
1710 Orrington Avenue
Evanston, IL 60201
About the Workshop

The Internet Things in Transportation and Logistics

This technical workshop, held in conjunction with the Fall 2015 meeting of the NUTC Business Advisory Council, will discuss the current applications of the Internet of Things (IoT) in transportation and logistics settings. IoT describes a network of physical and mobile objects or “things” embedded with electronics, software, sensors, and network connectivity. In a transportation system, dynamic interaction between these “things” enables vehicular communication, smart traffic control, logistics and fleet management and optimization, intelligent port operations, vehicle control, and energy, maintenance and safety management, among others. The workshop features speakers from transportation firms, internet infrastructure companies, and technology providers for the transportation industry, and will describe applications in trucking, rail, and port operations, and more.

Event Co-Chairs

Dr. Hani S. Mahmassani, William A. Patterson Distinguished Professor of Transportation; Director, Northwestern University Transportation Center

Mr. Breton Johnson, Associate Director, Northwestern University Transportation Center; Director, Center for the Commercialization of Innovative Transportation Technology

About NUTC

The Northwestern University Transportation Center is one of the world’s leading interdisciplinary education and research institutions, serving industry, government, and the public. Founded in 1954 to make substantive and enduring contributions to the movement of materials, people, energy, and information, the NUTC stands at the forefront of transportation research and education, bringing together academic researchers, students, and business affiliates in open exploration of transportation and supply chain operations. In so doing, the Center aims to influence national and international transportation policy, management, and technological developments, with the goal of making transportation and supply chain operations more productive, efficient, safe, secure, environmentally friendly, and socially beneficial.

About CCITT

The Center for the Commercialization of Innovative Transportation Technology (CCITT) fosters the implementation of innovative technologies for all modes of surface transportation, including but not limited to railways, mass transit, highways, and waterways.
## Program

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<th>Time</th>
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<td>2:00 - 2:05 p.m.</td>
<td>Welcome</td>
<td>Bret Johnson, Associate Director, Northwestern University Transportation Center; Director, Center for the Commercialization of Innovative Transportation Technology</td>
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| 2:05 - 3:25 p.m. | Presentations            | Hani S. Mahmassani, William A. Patterson Distinguished Professor in Transportation; Director, Northwestern University Transportation Center  
*What is the Internet of Things, and Why Should We Care?*  
Sunny Bajaj, Director, Telecom Engineering, Transport and Infrastructure, BNSF Railway  
Darryn Faulkner, Vice President, Latin America, Navman Wireless  
Kyle Connor, Business Development Manager, Transportation, Cisco Systems, Inc. |
| 3:25 - 3:45 p.m. | Break                    |                                                                              |
| 3:45 - 4:30 p.m. | Discussion               | Bret Johnson, Moderator  
Sunny Bajaj, Director, Telecom Engineering, Transport and Infrastructure, BNSF Railway  
Kyle Connor, Business Development Manager, Transportation, Cisco Systems, Inc.  
Darryn Faulkner, Vice President, Latin America, Navman Wireless  
Hani S. Mahmassani, William A. Patterson Distinguished Professor in Transportation; Director, Northwestern University Transportation Center  
Steve Matthews, Partner, Industry Consulting, Teradata |
Sunny Bajaj
Director, Telecom Engineering, Transport and Infrastructure, BNSF Railway

Sunny Bajaj was hired by BNSF Railway in 2010 as a consultant, working on the company’s Positive Train Control (PTC) initiatives. In 2013, he joined BNSF as Director of Field Operations for the Central Region, and continued in that role until 2014 when he accepted a new position as Director of Telecommunications for Transport and Infrastructure services.

After earning a Bachelor’s degree in his native India, Bajaj pursued a Master’s degree in electrical engineering from Colorado State University and an MBA from the University of Texas at Dallas. He is a Certified Project Management Professional. Bajaj lives in North Richland Hills, Texas, with his wife and twin boys.

Kyle Connor
Business Development Manager, Transportation, Cisco Systems, Inc.

As the Transportation Business Development Manager for the Americas, Kyle Connor is responsible for partners, solutions, and opportunities the further Cisco’s presence in the transportation industry.

Connor has an Electrical Engineering degree from Texas Tech University and has prior experience with Airbus Defense and Space, Lockheed Martin, and Harris Corporation. He also serves as an advisor to ITS Americas V2I Technical Working Group and has been published in Urgent Communications on the topic of how governmental agencies will benefit from private LTE solutions.

Darryn Faulkner
Vice President, Latin America, Navman Wireless

Darryn Faulkner directs Navman Wireless’ sales and distribution operations in the emerging markets of Latin and South America. His primary responsibilities include the overall management of distribution channels for Navman Wireless’ GPS-based fleet-management solutions which includes GPS Chile S.A. based in Santiago, Chile and Navman Wireless de Mexico. He oversees sales, identifies operational opportunities and facilitates wider regional support, helps establish and maintain relationships with burgeoning indirect channels, and fosters new relationships with potential distributors across the Latin and South American regions.

Faulkner joined Navman Wireless in 2006, starting as the Asia Pacific Business Development Manager. He was later promoted to Director of Business Development where his primary role was to establish new markets within Asia Pacific and Latin America, including the identification of suitable distribution partners based on their financial position, access to an established channel to market, Telco partner relationships, device compliance with government regulatory bodies, as well as to foster relationships with those partners. Prior to joining Navman Wireless, Faulkner served as National Business Development Manager – Transport Systems with Infinity Solutions Ltd., which now operates as Fujitsu NZ. Faulkner graduated from New Zealand’s Auckland University, College of Education.
Breton Johnson

Director, Center for the Commercialization of Innovative Transportation Technology; Associate Director, Northwestern University Transportation Center

Bret Johnson is the Associate Director of the Northwestern University Transportation Center, and also the Director of the Center for the Commercialization of Innovative Transportation Technology at Northwestern. In prior roles at Northwestern, he served as Director for the Homeland Security Innovation and Entrepreneurship Center and as Assistant Director for the Illinois Technology Enterprise Center, both technology-based economic development programs funded by and operated for the State of Illinois.

Prior to joining Northwestern, Johnson held senior engineering and project management positions at 3COM, Grayhill, Northrop-Grumman, and GE Astrospace. He received an M.A. in Science, Technology and Public Policy from The George Washington University, an M.S. in Aeronautics and Astronautics from Stanford University, and a B.S. in Mechanical Engineering from Rensselaer Polytechnic Institute.

Hani S. Mahmassani

William A. Patterson Distinguished Professor of Transportation, Northwestern University; Director, Northwestern University Transportation Center

Dr. Hani Mahmassani joined Northwestern University in 2007 with joint appointments in the McCormick School of Engineering and the Kellogg School of Management. Prior to joining Northwestern, he was the Charles Irish Senior Chaired Professor in Transportation Engineering and Director of the Maryland Transportation Initiative at the University of Maryland. He previously spent 20 years on the faculty of the University of Texas at Austin.

Mahmassani has more than 30 years of professional, academic, and research experience in the areas of multimodal transportation planning and network modeling, freight and logistics systems analysis, homeland security and emergency systems operations, intelligent transportation systems, econometric modeling (with applications to travel and freight demand forecasting), integrated systems management, and travel and shipper behavior analysis.

Steve Matthews

Partner, Industry Consulting, Teradata

Steve Matthews leads a team of industry experts who bring help manufacturing companies realize real-world value from their data. For over 25 years, Matthews has worked to deliver technology solutions heavy industries, starting out in the front line of oilfield operations, drilling wells in many different corners of the world before moving into senior management positions in Technology, Software Development, Business Intelligence, and Market Analysis.

Since joining Teradata, Matthews has worked with Data Scientists to uncover significant business insights for numerous clients in Oil & Gas, Hi-Tech manufacturing, and other industrial disciplines. As interest stirs in the “Internet of Things,” he is dreading the hype, but excited by the possibilities to deliver radical change and competitive advantage.