

EVENT DETAILS

Transportation Technology Symposium: Innovative Mobility Solutions

ORGANIZING COMMITTEE

Camille Kamga

Director, UTRC

Matthew W. Daus

Distinguished Lecturer, UTRC

Hongmian Gong

Professor, Hunter College

Marta Panero

Director, Strategic Partnerships, NYIT

Nadia Alsam

Assistant Director for Technology Transfer, UTRC

Penny Eickemeyer

Associate Director for Research, UTRC

This unique summit will galvanize leading experts, academics, practitioners, industry stakeholders and transportation advocates, to discuss the rapidly changing and expanding world of Transportation Technology and Innovative Mobility Solutions, as well as Public Policy-Making Implications.

Presenters will explore Cutting-Edge Intelligent Transportation Systems, Big Data Aggregation, and Innovative Transportation Technology Solutions to promote efficiency, safety, security and sustainability goals, as well as the impact on broader inter-modal and multi-modal transportation considerations.

Future and forward thinking innovative concepts are encouraged, and the pragmatic political reality of various movements (such as climate change/environmental policies and safety initiatives for reduced traffic fatalities), will be analyzed to ascertain whether society is ready to keep pace with the implementation of such technology.

PROGRAM OVERVIEW

| TIME | AUDITORIUM 1 | AUDITORIUM 2 | ROOM 3 |
|--|--|---|--|
| 8:30AM – 9:00AM | Registration and Breakfast | | |
| 9:00AM – 9:20AM | Welcoming Remarks | | |
| 9:20AM – 9:45AM | Introductory Remarks | | |
| 9:45AM – 11:15AM | Session 1 Innovative Solutions for Traffic Management | | |
| 11:15AM – 11:30AM | Coffee Break | | |
| 11:30AM – 1:00PM Breakout Sessions | Session 2 Big Data Transportation Data Analysis | Session 3 GPS/Smartphone Technology Applications | Session 4 Safety & Mobility Data |
| 1:00PM – 2:00PM | Luncheon | | |
| 2:00PM – 3:30PM Breakout Sessions | Session 5 Vehicle Technology Applications | Session 6 Transportation Simulation, Modeling & Analysis | Session 7 Security & Privacy |
| 3:30PM – 3:45PM | Break | | |
| 3:45PM – 4:15PM | Keynote Speaker | | |
| 4:15PM – 5:15PM | Session 8 For-Hire Ground Transportation Technology Developments | | |
| 5:15PM – 6:15PM | Closing Remarks & Networking Reception | | |

Poster Exhibition (Posters will be displayed from 9:00 AM to 4:00 PM in Auditorium 1 Foyer)

PROGRAM DETAILS

8:30AM – 9:00AM Breakfast & Registration

9:00AM – 9:20AM **Welcoming Remarks**
Dr. Nada Marie Anid, Dean of School of Engineering and Computing Sciences, NYIT
Dr. Camille Kamga, Director, UTRC
Matthew W. Daus, Distinguished Lecturer, UTRC

9:20AM – 9:45PM **Introductory Remarks**
(TBD)

9:45AM – 11:15AM

Session 1 Innovative Solutions for Traffic Management

| | | |
|--------------|---------------------------------|--|
| Auditorium 1 | Moderator: | Dr. Robert E. Paaswell |
| | Presenters: | |
| | Ahmad Sadegh | From Integrated Corridor Management to Integrated Regional Management - Dallas Experience |
| | Ernest Athanailos | Transit Signal Priority (TSP) – Lower Manhattan |
| | Andrew J. Bechtel | Characterizing Bridge Functional Obsolescence using Congestion Performance Measures Determined from Anonymous Probe Vehicle Data |
| | Brad J. Miller & David Liebgold | Systems Engineering for ITS Deployments: From Conception to Completion |

11:15AM – 11:30AM **Break**

Poster Exhibition

| | |
|------------------------|---|
| Auditorium 1 | (Posters will be displayed from 9:00 AM to 4:00 PM in Auditorium 1 Foyer) |
| Micah Bergdale | An Integrated Mobile Ticketing Experience |
| Thomas M. Brennan Jr. | Characterizing Directional Corridors Based on Probe Vehicle Data |
| Muhammad Anwar Hussain | Optimization of Vehicle-to-Grid Ancillary Services Integrating VANET Communications |
| Sarah M. Kaufman | Mobility, Economic Opportunity and New York City Neighborhoods |
| Maurice Rached | Challenges of Transit Oriented Developments and Car-sharing |
| Tra Vu | New York's Revolutionary Transit Signal Priority Program |

PROGRAM DETAILS

11:30AM – 1:00PM

Session 2 Big Data: Transportation Data Analysis

Auditorium 1

Moderator: Matthew W. Daus

Presenters:

Felisa Vázquez-Abad Integrating Technology for a Self-regulated Public Bike Share

Tom Batz Introduction to TRANSCOM's Data Fusion Engine (DFE) and Selected Priorities Applied to Evaluated Links (SPATEL)

Reuben Juster Apples To Apples: Measuring the Performance of Transit and Roadways Equivalently

Bo Du Temporal and Spatial Freeway Work Zone Delay Estimation Using Probe-vehicle Data

Session 3 GPS/Smartphone Technology Applications

Auditorium 2

Moderator: Dr. Hongmian Gong

Presenters:

Candace Brakewood Using Mobile Ticketing Data to Estimate an Origin-Destination Matrix for New York City Ferry Service

Lerone Savage Using Smartphone Data for Travel Mode Detection in New York City

Michalis Xyntarakis Quantifying Bus Performance – a comparison between GPS bus trajectories and schedule data

Mario Giampieri Integrating Real-time GIS and Social Media for Qualitative Transportation Data Collection

Session 4 Safety & Mobility Data

Room 3

Moderator: Penny Eickemeyer

Presenters:

Kun Xie Development of An Overall Experimental and Theoretical Methodology for Video-Based Safety Assessment

Patricia Ott,
Jennifer Buisson, &
Michael O'Connell New Jersey's Red Light Running (RLR) Camera Program – Newark, NJ Spotlight

Jonathan Figueroa &
Amit Bhowmick Technology application in Safe and Secure operation of Ferry Transportation in New York Harbor

1:00PM – 2:00PM

Luncheon

PROGRAM DETAILS

2:00PM – 3:30PM

Session 5 Vehicle Technology Applications

Auditorium 1 **Moderator:** Dr. Camille Kamga

Presenters:

Yunfei Hou Towards Cooperative Vehicle and Intersection Control:
An Energy Efficient Approach

Ricardo A. Daziano Analyzing Consumers' Willingness to Pay for Autonomous
Electric Vehicles

Jonathan Voris Selective Sensing for Transportation Safety

Kaan Ozbay Evaluating Mobility and Safety Applications of Connected
Vehicles using BSM Data Emulator

Session 6 Transportation Simulation, Modeling & Analysis

Auditorium 2 **Moderator:** Dr. Sabiha Wadoo

Presenters:

Andrew W. Smyth Application of Trajectory Cluster Analysis to the Management
of Road Networks

Hong Yang & Zhengyu Wang Sparse GPS Trajectory Data Compression and Recovery based
on Compressed Sensing

Huajing Shi A GPS Data Processing Method For Truck Activity Analysis

Xintao Liu City Monitoring with Travel Demand "Momentum" Vector Fields:
Theoretical and Empirical Findings

Session 7 Security & Privacy

Room 3 **Moderator:** Dr. Sertac Artan

Presenters:

Laura Riegel Using GTFS-realtime Data to Measure Transit Performance

Rae Zimmerman & Quanyan Zhu Overcoming Cyber Threats to Transportation Vehicles and
Roadway Infrastructure

Yunfei Hou The Transportation Secure Data Center: Enabling Research
with High-Precision Personal GPS Data in a Way that
Protects Participant Privacy

PROGRAM DETAILS

3:30PM – 3:45PM **Break**

3:45PM – 4:15PM **Keynote Speaker**
(TBD)

4:15PM – 5:15PM

Session 8 For-Hire Ground Transportation Technology Developments

Auditorium 1 **Moderator:** Matthew W. Daus

Presenters:

Effie Dror DataTrack247

Tarek Mallah Karhoo

Amos Tamam VeriFone

Brendan Riley BYD Motors, Inc.

5:15PM – 6:15PM **Closing Remarks & Networking Reception**
