Fourth Annual CAMMSE Research Symposium - FINAL PROGRAM

Day 1: Thursday, November 4 (8:00AM-5:00PM)

8:00-8:15AM Welcome and Opening Remarks (Moderator: Dr. Wei Fan)

8:00-8:10AM Dr. Robert S. Keynton, Dean, College of Engineering, UNCC

8:10-8:15AM Dr. Wei Fan, CAMMSE Director

8:15-8:55AM **Keynote Presentation No. 1** (Moderator: Dr. Wei Fan)

Title: "Near Term Steps to Accelerate Deep Decarbonization of United

States Transportation"

Speaker: Dr. Chris Hendrickson, Carnegie Mellon University

Recorded Video for Opening Remarks and Keynote Presentation #1

9:00-10:20AM Technical Session #1: Emerging Mobility Services, Planning and

Operations

Moderator: Dr. John Ivan, University of Connecticut

"Developing Smart Traffic Signal Control"

Speaker: Randy Machemehl, Ph.D., P.E., University of Texas at Austin

"Estimation of Pedestrian Compliance at Signalized Intersections

Considering Demographic and Geographic Factors"

Speaker: John Ivan, Ph.D., P.E., University of Connecticut

"An Innovative Signal Timing Strategy for Implementing Contraflow Left-

Turn Lanes at Signalized Intersections with Split Phasing"

Speaker: Dr. Yi Qi, Texas Southern University

"Exploring the Impacts of Transportation System on Human Behaviors

during Disasters using Mobility Data"

Speaker: Jin Zhu, Ph.D., University of Connecticut

Recorded Video for Technical Session #1

10:30-11:50AM Technical Session #2: Improving Multimodal Mobility and Equity Using

Data Analytics

Moderator: Dr. Yi Qi, Texas Southern University

"Captive Drivers & Choice Riders: The Overlooked Constituencies in

Transportation Planning"

Speaker: Carol Atkinson-Palombo, Ph.D., University of Connecticut

"Modeling and Evaluating Public Transit Equity and Accessibility by

Integrating General Transit Feed Specification Data"

Speaker: Wei (David) Fan, Ph.D., P.E., University of North Carolina at

Charlotte

"Using Computational Biology to Mitigate Path Overlap in Transit

Assignment"

Speaker: Timothy James Becker, Ph.D., University of Hartford

"Analysis of Intermodal Vessel-to-Rail Connectivity"

Speaker: Mehdi Azimi, Ph.D., P.E., Texas Southern University

Recorded Video for Technical Session #2

1:00-1:40PM Keynote Presentation No. 2 (Moderator: Dr. Wei Fan)

Title: "Forecasting and Estimating Transportation Metrics in the

COVID-19 and CAV Era"

Speaker: **Dr. Laurence Rilett**, Auburn University

1:45-3:20PM Invited Speakers' Session: Connected and Automated Vehicles

Moderator: Dr. Wei Fan, University of North Carolina at Charlotte

"Texas Connected Freight Corridors"

Speaker: Jianming Ma, Ph.D., P.E., Texas Department of Transportation

"CAV Modeling Rising Up with Digital Twin: Transforming the Interconnection between Open data, Researchers and City Planners"

Speaker: Xuesong Zhou, Ph.D., Arizona State University

"System Optimal Vehicle Platooning Control for Eco-driving at Signalized intersection Built upon Hybrid MPC System, Online Learning and Distributed Optimization"

Speaker: Lili Du, Ph.D., University of Florida

"Cooperative Platooning along with Human Driven Vehicles"

Speaker: B. Brian Park, Ph.D., University of Virginia

Recorded Video for Keynote Presentation #2 and Invited Speakers' Session on CAVs

3:30-4:50PM Technical Session #3: Connected and Autonomous Vehicle and

Machine Learning Applications

Moderator: Dr. Randy Machemehl, University of Texas at Austin

"Two-stage Robust Facility Location Problem with Drones" Speaker: Stephen Boyles, Ph.D., University of Texas at Austin

"Effect of Multimodal Connected Vehicle App on Transit Stop Catchment Area"

Speaker: Xianming Shi, Ph.D., P.E. Washington State University

"Skeleton-Graph: Long-Term 3D Motion Prediction from 2D Observations

Using Deep Spatio-Temporal Graph CNNs"

Speaker: Claudel Christian, Ph.D., University of Texas at Austin

"Effect of Connected and Autonomous Vehicles on Supply Chain

Performance"

Speaker: Ji Yun Lee, Ph.D., Washington State University

4:50-5:00PM Recap of Day 1 (Dr. Wei Fan, CAMMSE Director)

Recorded Video for Technical Session #3

Day 2: Friday, November 5 (8:00AM-12:00PM)

8:05-9:35AM <u>Student Lightning Presentations: Session #1</u>

Moderator: Mr. Li Song, University of North Carolina at Charlotte

9:45-11:15AM Student Lightning Presentations: Session #2

Moderator: Mr. Shaojie Liu, University of North Carolina at Charlotte

11:30-11:50AM Student Awards Ceremony

Notes: - Announcement of Student Lightning Presentation Awards (Top 11) was made.

11:50-12:00PM Closing Remarks (Dr. Wei Fan, CAMMSE Director)

Recorded Video for Student Lightning Presentations