Maryland Connected & Automated Vehicles Working Group

May 21, 2025

TIME: 9 am – 12:30 pm

In Person: Morgan State University

Parking is available at the North Campus Garage next to the CBEIS Building. Use this address to get to the CBEIS Building: **5299 Perring Pkwy, Baltimore, MD 21214.**

If you did NOT receive an email from Morgan regarding parking, make sure you pay \$5 at the kiosk. If you did receive an email, make sure you follow the directions for registered parking.

| AGENDA | |
|---------------|---|
| 9 a.m. | Networking Continental Breakfast provided by MSU (Schafer Atrium) |
| 9:30 am | Welcome & Opening Remarks |
| | Administrator Chrissy Nizer, Maryland Motor Vehicle Administration, Chair |
| | Dr. Mansoureh Jeihani, Ph.D., PTP, Morgan State University, Professor & Director, |
| | National Transportation Center SMARTER Center |
| 9:45 am | Transportation-as-a-Service (TaaS) for Autonomous Public Transit |
| | Paula Bejarano, BENTELER Mobility |
| 10:20 am | Short Break |
| 10:30 am | The Future of Accessible Autonomous Transportation |
| | Sivashankar Sivakanthan, PhD, University of Pittsburgh |
| 11:10 am | NEMA (National Electronics Manufacturers Association) |
| | Make it American Program |
| | Steve Griffith, PMP, Executive Director, Regulatory & Industry Affairs, Mobility |
| 11:20 am | University Updates |
| | Morgan State University, Mansoureh Jeihani, Ph.D., PTP |
| | University of Maryland, Thomas H. Jacobs, Director, Center for |
| | Advanced Transportation Technology & The Maryland Transportation |
| | Technology Transfer Center |
| | Johns Hopkins University, Anton "Tony" Dahbura, Ph.D., Co- |
| | Director of the Johns Hopkins Institute for Assured Autonomy and is |
| | also Executive Director of the Johns Hopkins University Information |
| | Security Institute |
| 11:45 am | Updates from Attendees |
| 12 pm | Adjourn |
| 12 pm – 12:30 | Further conversation with Benteler (Schafer Auditorium) |
| pm | Morgan Demos (Schafer Atrium) |

Questions? Email: <u>CAVMaryland@mdot.maryland.gov</u>

SPEAKERS:



Paula Bejarano

Senior Vice President for Business Development & Sales BENTELER Mobility paula.bejarano@benteler-mobility.com

https://www.benteler-mobility.com/

Paula Bejarano is the Senior Vice President for Business Development & Sales for BENTELER Mobility in the US. In this role she engages with cities, public transit agencies as well as federal officials. She has a wealth of experience in the

autonomous vehicle industry. Previously, she led customer and self-driving supplier partnerships for the autonomous trucking program at Navistar International, part of the Volkswagen commercial group. She has spent several years in Silicon Valley working with mobility startups and her focus included go-to-market strategies, commercial negotiations, as well as growth. She is passionate about the positive impact that autonomy and electrification can have on transportation and society as a whole. Paula holds a bachelors in aerospace engineering, masters in mechanical engineering and an MBA from Georgetown University.

Benteler Mobility provides a turnkey solution for autonomous transportation which aims at 1) simplifying the complex adoption of AVs, 2) reduces risk around technology and high capex investment and 3) leverages cost efficiencies to reduce fleet opex.



Sivashankar Sivakanthan, Ph.D.

Human Engineering Research Laboratories University of Pittsburgh <u>SIS65@pitt.edu</u> <u>https://www.herl.pitt.edu/</u>

Dr. Sivashankar Sivakanthan attained his Masters & Ph.D. in Rehabilitation Engineering. He is now a Postdoctoral Associate at the Human Engineering Research Laboratories under the guidance of Dr Rory Cooper. His research concentration covers robotic wheelchairs, accessible autonomous transportation, and accessible air travel. Dr.

Sivakanthan is originally from the United Kingdom where he originally attained his Financial Mathematics BSc at the Brunel University of London focusing on stochastic algorithms, whilst working in one of the top Fortune 100 companies in the financial division for over 6 years.



Steve Griffith

Executive Director, Regulatory & Industry Affairs, Mobility National Electronics Manufacturers Association (NEMA) <u>Steve.Griffith@nema.org</u> <u>https://www.makeitelectric.org/</u>

Steve Griffith is an Executive Director, Regulatory and Industry Affairs for NEMA's Mobility Sector. He oversees NEMA's engagement with regulatory agencies of jurisdiction in mobility. He leads a matrix team to develop a strategy to advance NEMA's policy positions and desired

regulatory outcomes, actively engages on relevant regulatory agency programs and rulemakings, and serves as a subject matter expert on mobility sector issues and priorities for both internal and external audiences.



Mansoureh Jeihani, Ph.D., PTP Professor and Director of National Transportation Center SMARTER Center Morgan State University <u>SMART Intersection – The SMARTER Center</u> mansoureh.jeihani@morgan.edu

Dr. Mansoureh Jeihani is a professor and the director of the National Transportation Center at Morgan State University and the Safety & Mobility Advancement Regional Transportation and Economics Research (SMARTER) Center, a USDOT Regional University Transportation Center. She has a multidisciplinary background in Civil Engineering/Transportation System,

Economics, and Computer Engineering. Dr. Jeihani has over 20 years of experience in applied research in traveler behavior, ITS/CAV, and traffic safety. She has published two books and over 150 articles in peer-reviewed journals, conference proceedings, and technical reports. She has also been the PI/Co-PI for over 60 research grants funded by federal or state agencies totaling over \$30M. Dr. Jeihani is the chair of Maryland Attainment Report Advisory Committee; the chair of the Maryland Connected & Automated Vehicles Technical Subgroup; an executive member of the Council of University Transportation Centers (CUTC); a member of the Transportation Research Board (TRB)- Artificial Intelligence and Advanced Computing Applications committee, Maryland Quality Initiative (MDQI) and DC Quality Initiative (DCQI) Innovations Subcommittee, Maryland Connected & Automated Vehicles Working Group, National Cooperative Highway Research Program (NCHRP) Panel, and Behavioral Traffic Safety Cooperative Research Program (BTSCRP) Panel. Dr. Jeihani was on the Safety panel of the White House ARPA-I Summit in June 2023.



Thomas Jacobs

Director, Center for Advanced Transportation Technology

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Anton Dahbura, PH.D., IEEE Fellow Co-Director, John Hopkins Institute for Assured Autonomy The Johns Hopkins University AntonDahbura@jhu.edu

Anton Dahbura is Co-Director of the Johns Hopkins Institute for Assured Autonomy and is also Executive Director of the Johns Hopkins University Information Security Institute in Baltimore, MD. He joined the faculty of the Johns Hopkins University Department of Computer Science as an Associate Research Professor in 2012. He also holds an appointment in the Johns Hopkins University Malone Center for Engineering in

Healthcare. Prior to that, he served as a researcher at AT&T Bell Laboratories, was an Invited Lecturer in the Department of Computer Science at Princeton University, and served as Research Director of the Motorola Cambridge Research Center in Cambridge, MA. He received the BSEE, MSEE, and PhD in Electrical Engineering and Computer Science from the Johns Hopkins University in 1981, 1982, and 1984, respectively. He is a Fellow of the IEEE.

• CAV-related work at Johns Hopkins:

At the Johns Hopkins University S4 V2X Communications Lab, researchers are advancing critical technologies to improve Vehicle-to-Everything (V2X) communication, a key enabler for safe and efficient autonomous driving. The lab focuses on six core research areas. First, multi-path communication enhances signal reliability by using redundant pathways while ensuring synchronized data for accurate situational awareness. Second, the use of network coding in place of TCP improves data throughput and reduces latency in high-density environments. Third, mobile trust certificates provide secure, tamper-resistant communication to guard against spoofing and Sybil attacks. The team also addresses data efficiency through duplicate sensor data suppression, minimizing bandwidth waste while preserving essential information. Fifth, researchers are developing methods to aggregate sensor data into simplified, real-time road status updates for better decision-making. Finally, status and warning message broadcasting ensures critical safety alerts are delivered instantly. Together, these innovations support a more secure, responsive, and connected autonomous vehicle ecosystem.