

2018 CCAT Global Symposium on Connected and Automated Vehicles and Infrastructure

North Campus Research Complex Ann Arbor, MI

Driven by the rapid development of connected and automated vehicle (CAV) technologies, we are on the cusp of a new revolution in transportation safety and mobility on a scale not seen since the introduction of automobiles a century ago. As CAV technologies continue their steady advance towards deployment, many questions remain, whose answer are critical.

The 2018 Global Symposium for Connected and Automated Vehicles and Infrastructure will focus on overarching research issues related to CAV research, technology, testing and deployments, policy, as well as education, training, and workforce development. The Symposium is sponsored by the U.S. Department of Transportation's Center for Connected and Automated Transportation (CCAT) at the University of Michigan.

March 7

7:30 — 8:30	Registration and Continental Breakfast
8:30 — 8:45	Welcome, Opening Remarks Dr. Henry Liu , CCAT Director
8:45 — 9:30	Keynote Speaker Bob Zhang , Co-Founder and CTO, Didi Chuxing Didi Chuxing is the world's leading mobile transportation platform. The company offers multiple services for over 450 million users, including Taxi, Express, Premier, Luxe, Hitch, Bus, Minibus, Designated Driving, Car Rental, Enterprise Solutions and Bike-Sharing. With its daily rides reaching up to 25 million, over 21 million drivers find work opportunities on DiDi platform.
9:30 — 10:30	Panel 1: Executive Panel on Mobility Join us for an executive session on the future of mobility. The world's leaders in mobility will draw from their vast experiences to share their vision on policy, technology, and infrastructure. The panel will discuss how the current transportation system will be transformed to optimize the movement of people and goods to enhance our everyday lives.

	<p>Moderator: Jack Hu, Vice President for Research, University of Michigan</p> <p>Speakers: Justin Erlich, Head of Policy, Autonomous Vehicles & Urban Aviation, Uber Neil Pedersen, Executive Director of the Transportation Research Board Dan Sperling, Director of the Institute of Transportation Studies, University of California, Davis Oliver Steinig, VP Business Development and Corporate Strategy North America, Robert Bosch LLC</p>
10:30 — 11:00	Break
11:00 — 12:00	<p>Panel 2: Smart Cities and Vehicle Mobility Vehicles are getting connected, and not just to the internet! They’re getting connected to each other, to the infrastructure, and to road users including pedestrians, bicyclists etc. More than that, connected vehicles are an integral part of “Smart Cities.” A Smart City integrates innovative technology – self-driving cars, connected vehicles, and smart sensors – into their transportation network. In addition to the U.S. DOT Smart Cities challenge, pockets of innovation are cropping up across the county and around the world.</p> <p>Moderator: Jeff Hood, Principal, Deloitte Consulting LLP</p> <p>Speakers: Mark de la Verge, Chief of Mobility Innovation, City of Detroit Carla Bailo, Chief Executive Officer, Center for Automotive Research (CAR) Norm Marks, Automotive Strategy & Business Development, NVIDIA Jon Coleman, Corporate Strategist and Smart City Leader, Ford Motor Company Ed Straub, Technical Program Director, American Center for Mobility</p>
12:00 — 1:30	Lunch
1:30 — 2:30	<p>Panel 3: Policy and Social Justice Connected, automated and shared mobility solutions have the greatest potential to positively impact the lives of those living</p>

	<p>in historically underserved communities, senior citizens and the economically challenged. The absence of public transportation or personal vehicle ownership leave thousands without access to healthcare, education, and social interactions reducing their quality of life and often exacerbating economic hardships. U-M is on the forefront of transportation as an issue of social justice. How, and who, are benefiting from a shared economy – and how do we create balance?</p> <p>Moderator: Tierra Bills, Assistant Professor and Michigan Society Fellow, University of Michigan Department of Civil and Environmental Engineering</p> <p>Speakers: Richard Ezike, Mobility and Equity Kendall Fellow at Union of Concerned Scientists and President of NSBE DC Professionals Gloria Jeff, Principal Planner for the Wichita Area Metropolitan Planning Organization, and the current Chair of the Environmental Justice Committee at the Transportation Research Board Jonathan Levine, Professor of Urban and Regional Planning, Taubman College of Architecture and Urban Planning, University of Michigan</p>
<p>2:30 — 3:30</p>	<p>Student Poster Session</p> <p>This is an opportunity for students to present their work to Symposium participants. A rolling-break also will take place during this time.</p>
<p>3:30 — 4:30</p>	<p>Panel 4: Infrastructure Needs in a Connected and Automated World</p> <p>Communication between developers/designers of transportation facility infrastructure and CAV technology must be established as early as possible to advance smooth development and transition to CAV and to establish a connection between vehicles and infrastructure. This will help enhance the life of the infrastructure while minimizing traffic disruption.</p> <p>Moderator: Imad Al-Qadi, Professor of Civil Engineering, University of Illinois at Urbana-Champaign</p> <p>Speakers:</p>

	<p>Andrew Bui, Director for AECOM Ventures</p> <p>Shane Underwood, Associate Professor, North Carolina State University</p> <p>Benjamin Worel, MnROAD Operations Engineer, Minnesota Department of Transportation</p>
4:30 — 4:45	<p>ITS Michigan Scholar Award and Recognition</p> <p>Yousuf Taufiq, ITS Michigan President</p> <p>Assistant Vice President, Michigan Traffic and ITS Engineering, WSP</p>
4:45 — 5:00	Wrap-Up
5:00 — 5:15	Depart for the University of Michigan Museum of Art
5:30 — 6:30	UMMA exhibits and gift shop opens
6:00 — 8:00	Dinner

March 8

7:30 — 8:30	Continental Breakfast
8:30 — 8:45	<p>Welcome, Opening Remarks</p> <p>Dr. Henry Liu, Henry Liu, Director, CCAT</p>
8:45 — 9:30	<p>Day 2 Morning Presentation and Discussion</p> <p>Michelle Krebs, Director, Autotrader</p> <p>Reluctant or Ready? The four essentials of driving customer acceptance of self-driving vehicles.</p> <p>The promise of self-driving vehicles is fast becoming a reality on roadways across the U.S., but are consumers reluctant or ready? Krebs reveals the newest research into consumer sentiment toward automation.</p> <p>Krebs is a Detroit based executive analyst for Autotrader and an award-winning automotive writer with over thirty-five years of experience covering and observing the auto industry. She is the former President of the Society of Automotive Analyst and is a board member and past president of Automotive Press Association.</p> <p>Following this presentation, Krebs will be joined by Paul Lienert of Thompson Reuters where he covers the future of</p>

	<p>transportation/mobility and the intersection of autos, technology, and venture capital. Lienert is an award-winning journalist covering the global auto industry for over forty years.</p>
<p>9:30 — 10:35</p>	<p>Panel 1: Enabling Technologies — CCAT Research The Center for Connected and Automated Transportation at UMTRI is the U.S. DOT region 5 University Transportation Center. It is a consortium between the University of Michigan, Purdue University, University of Illinois – Urbana Champaign, University of Akron, Central State University, and Washtenaw Community College. CCAT’s mission is to significantly impact the evolution of the U.S. next-generation transportation systems with emerging technologies on safety, mobility, and sustainability and to provide national and regional leadership for connected and automated transportation research, science, education, training, and deployment. This session will highlight research being conducted by the CCAT consortium. The industry’s premier researchers will present cutting-edge research initiatives in connected and automated transportation. Topics include Cooperative Control Mechanism for Platoon Formation of Connected and Autonomous Vehicles; Access Control at Major-Minor Intersection through CAV in Mixed Traffic; Operations of Connected and Autonomous Freight Trucks under Congestion and Infrastructure Cost Considerations; and CAV Testing Scenario Design and Implementation using Naturalistic Driving Data and Augmented Reality.</p> <p>Moderator: Henry Liu, Director, CCAT</p> <p>Speakers: Ping Yi, Professor, University of Akron Srinivas Peeta, Professor of Civil Engineering in the Transportation and Infrastructure Systems Group, Purdue University, CCAT Associate Director Yafeng Yin, Professor of Civil and Environmental Engineering, University of Michigan Imad Al-Qadi, Professor of Engineering, the University of Illinois at Urbana-Champaign, Director of the Illinois Center for</p>

	Transportation (ICT) at the University of Illinois at Urbana-Champaign
10:35 — 11:00	Break
11:00 — 12:00	<p>Panel 2: Leadership, Education, Training and Workforce Development</p> <p>Education, training, and workforce development are critical to the successful deployment of CAV technologies. The need exists for both engineers as well as skilled technicians. This panel will focus on the need for a full-spectrum of leadership development and educational programs, ranging from leadership training to full-scale engineering-concentrated programs, and 2- and 4-year degree programs to advanced education. This panel will highlight student opportunities that will advance their academic knowledge in the classroom, research, and skills development opportunities.</p> <p>Moderator: Alan Lecz, Director, Washtenaw Community College’s Advanced Transportation Center</p> <p>Speakers:</p> <p>Carla Bailo, Chief Executive Officer, Center for Automotive Research (CAR)</p> <p>Collin Castle, MDOT ITS Program Manager</p> <p>Dr. Rose Bellanca, Washtenaw Community College President</p> <p>Dr. Michelle Mueller, Washtenaw Community College, Vice President of Economic, Community and College Development</p>
12:00 — 1:30	Lunch
1:30 — 2:30	<p>Panel 3: Human Factors: Integrating the Driver into a Driverless World</p> <p>Connectivity, information sharing and dissemination, and automation under CAV technologies raise critical questions related to how humans (drivers, travelers, pedestrians, etc.) interface and interact with these technologies. This panel will discuss related needs, challenges, and solutions.</p> <p>Moderator: Srinivas Peeta, Professor of Civil Engineering in the Transportation and Infrastructure Systems Group, Purdue University, CCAT Associate Director</p> <p>Speakers:</p>

	<p>Prof. Hani Mahmassani, William A. Patterson Distinguished Chair in Transportation, and Director, Transportation Center, Northwestern University</p> <p>Dr. David Yang, Executive Director, AAA Foundation for Traffic Safety</p> <p>Pamela Fisher, Director, Economic Development & Special Initiatives, Indiana Department of Transportation</p>
2:30 — 3:00	Wrap-Up