

B106 – Automated Driving System (ADS) Safety Metrics in Theory and Practice



Laura Fraade-Blanar
RAND Corporation

Dr. Laura Fraade-Blanar is an associate policy researcher at RAND Corporation. Her work sits at the intersection of health, technology, and transportation, applying her background in public health and injury epidemiology to questions around measuring risk and uncertainty. She focuses on the safety of new transportation modes including automated vehicles and mobility-on-demand/mobility-as-a-service, as well as access and equity issues around older adult transportation. Dr. Fraade-Blanar holds a PhD from the

University of Washington, School of Public Health. Prior to her doctoral work she was a research scientist at the Insurance Institute for Highway Safety (IIHS). She received a Master of Health Science in International Health and a Bachelor of Arts in Public Health from Johns Hopkins University.



Kevin Gay
Aurora

Kevin Gay leads the external development of safety standards and best practices for Aurora and previously Uber ATG. Kevin leads Aurora's technical engagement activities with the U.S. Department of Transportation as well as with a number of standards development organizations including the IEEE P2846, the Automated Vehicle Safety Consortium (AVSC), Association for Standardization of Automation and Measuring Systems (ASAM) and SAE On-Road Automated Driving Committee (ORAD). He also

serves as the Secretary of the IEEE P2846 Working Group. Prior to joining Uber ATG, Kevin served for 16 years in the U.S. Department of Transportation in various roles across multiple modal administrations. At the National Highway Traffic Safety Administration, he was the Senior Advisor for Technology Policy to the Deputy Administrator where he provided strategic oversight of the vehicle cybersecurity and Vehicle-to-Everything (V2X) Communications programs. At Federal Highway Administration, Kevin was the Chief of Policy at the Intelligent Transportation System Joint Program Office where his team's research portfolio included radio frequency spectrum, cybersecurity, standards, architecture, data management and privacy. Finally at the Volpe National Transportation Systems Center, Kevin led cross-functional teams of technical experts to conduct research projects in the research areas of automated vehicles, field operational tests, public-key infrastructure cryptography, program evaluation and analysis, and statistical model development. Kevin is certified as a Project Management Professional and has a Bachelor of Science in Applied Mathematics from the Georgia Institute of Technology.



Shaun Kildare
Advocates for Highway and Auto Safety

Dr. Kildare is the Senior Director of Research at Advocates for Highway and Auto Safety. He holds a B.S. in Biomedical Engineering from Case Western Reserve University and both a M.Sc. and Ph.D. in Civil Engineering from The George Washington University. Dr. Kildare's responsibilities at Advocates include research on technical issues and safety technology, data analysis, evaluation of safety research studies, and development of policy positions. He represents Advocates at technical and industry meetings and also

oversees Advocates' technical statements and comments filed with federal and state agencies.



Kristofer Kusano

Waymo LCC

Kristofer Kusano is a senior safety research engineer at Waymo where he works on safety impact methodologies. Previously to Waymo, Kristofer worked at Toyota and was a researcher at Virginia Tech.



Jari Saarinen

Sensible 4

Jari Saarinen, or “Mr. Autonomous Vehicle” has over a decade of academic robotic research behind him. He has done his doctoral thesis at Aalto University, earlier known as Helsinki University of Technology, in the beginning of 2000. Later, after a postdoc at Örebro University Jari began a commercial robotic career by founding his first own company GIM Robotics to create various robots and commercial research for autonomous intelligent machines. Today he is leading the technical development of the Sensible 4 autonomous driving software product.



Edward Straub

SAE International

Edward Straub coordinates industry, government, and cross-functional activities related to connected and automated vehicles at SAE International. He is the SAE Industry Technologies Consortia (SAE ITC) vice president for land systems and the director of SAE International’s office of automation. He is responsible for providing a systems view of emerging automated vehicle technologies and their impact on the socio-technical landscape, operational considerations, and best practices. Dr. Straub contributes to numerous global standards activities, reports, and research initiatives related to automated vehicle technologies and deployment.



Jack Weast

Intel

Jack Weast, Intel Fellow, Vice President, Automated Vehicle Standards, Mobileye : Jack Weast is an Intel Fellow and a Vice President for Automated Vehicle Standards at Mobileye. In this role, Jack leads a global team working on AV safety technology and the related standards that will be needed to understand what it means for an AV to drive safely. In his over 20-year career at Intel, Jack has built a reputation as a change agent in new industries with significant technical contributions to a wide range of industry-first products and

standards in industries that are embracing complex high performance heterogeneous computing for the first time. With an End to End Systems perspective, Jack combines a unique blend of embedded product experience with a knack for elegant System and Software design that will accelerate the adoption of Autonomous Driving. Jack is the co-author of

“UPnP: Design By Example”, and is the holder of over 40 issued patents with dozens pending. Jack is an Adjunct Professor at Portland State University where he was recently inducted into the Portland State Maseeh College Academy of Distinguished Alumni in recognition of Jack’s achievements, leadership and service to the Engineering and Computer Science Profession, as well as to Society. Outside of work he is a classical pianist and never turns down an opportunity to take the karaoke stage.



Bolin Zhou

China Automotive Technology and Research Center

Mr. Bolin Zhou, currently working as Senior Technical Supervisor for China Automotive Technology and Research Center Co., Ltd (CATARC), has many years of experiences in Autonomous Driving System verification and validation. He is working as the secretary and expert for ISO TC22/SC33 WG9, the workgroup for Test Scenarios of Automated Driving Systems, and had actively contributing to many international and national standardization and homologation activities. He also runs one of the working group in IAMTS (International Alliance for Mobility Testing and Standardization), specifically seeking for solutions in tackling the issue by harmonizing the differences globally. He held a master degree from Columbia University and current is based in Tianjin, one of the major port city in China.



David S. Zuby

Insurance Institute for Highway Safety

David Zuby is chief research officer for the Insurance Institute for Highway Safety. Working out of the Vehicle Research Center (VRC), he oversees and coordinates research by the VRC, the Institute research department in Arlington and the Highway Loss Data Institute. Mr. Zuby is the author of numerous research papers published by the Institute on topics such as the biomechanics of injury, pedestrian protection, crashworthiness and crash investigation. Prior to joining the Institute as a research engineer in 1993, Mr. Zuby worked on research projects for the National Highway Traffic Safety Administration at Transportation Research Center in Ohio. He holds a bachelor's degree from Northwestern University in Illinois.