B304 – AV to Road User Communications: What Have We Learned from Research?



Tatsuru Daimon Keio University

Tatsuru Daimon is a Professor of Faculty of Science and Technology, Keio University, Japan. He received Ph.D. degree in industrial engineering from Keio University. He has been investigating driver behavior, in-vehicle human machine interface and cooperative vehicle-infrastructure systems. In recent years, he has also worked on driver behavior with automated driving systems and communication methods between automated vehicle and surrounding traffic participants, and automotive AR applications.



Josh Domeyer
Toyota Collaborative Safety Research Center

Joshua E. Domeyer is a senior human factors research scientist in the Toyota Collaborative Safety Research Center. He received a Ph.D. in Industrial and Systems Engineering at the University of Wisconsin-Madison in 2021 and B.S. and M.S. degrees in experimental psychology from Central Michigan University in 2009 and 2011. He has been a human factors researcher at Toyota since 2011 where his research has focused on driver-vehicle interface, distraction, and human-automation interaction. He joined the Collaborative Safety Research Center in 2017 to explore the communication between drivers and pedestrians with the goal of informing the development of vehicle automation. He is the Chair of SAE's Safety and Human Factors Steering Committee and a U.S. expert for the ISO TC22/SC39/WG8 standards group.



Yee Mun LeeInstitute for Transport Studies, University of Leeds

Yee Mun Lee obtained her BSc (Hons) in Psychology and her PhD degree in driving cognition from The University of Nottingham Malaysia in 2012 and 2016 respectively. She is currently a research fellow at the Institute for Transport Studies, University of Leeds. Her current research interests include investigating the interaction between automated vehicles and other road users, by using various methods, especially virtual reality experimental designs. Yee Mun was the leader of the 'Methodologies, Evaluation and Impact Assessment' Work Package of the EU-funded project, interACT (www.interactroadautomation.eu). She is now involved in another EU-funded project, L3Pilot

(www.l3pilot.eu), where she investigates the Users' Evaluation and Experience of a Level 3 system. Finally, Yee Mun is one of the SHAPE-IT project supervisors, where she continues her research on Human interaction with AVs in Urban Scenarios (www.shape-it.eu), and also actively involved in the International Organization for Standardization (ISO).





Natasha Merat
University of Leeds, Institute for Transport Studies (ITS)

Professor Merat is an experimental psychologist, leads the Human Factors and Safety Group, @ITS Leeds and is Director of Virtuocity@Leeds. Her main research interests are in understanding the interaction of road users with new technologies. She applies this interest to studying factors such as driver distraction and driver impairment, and she is an expert in studying the human factors implications of highly automated vehicles. She has been PI to a number of key UK and European Projects on automated vehicles, in recent years, Including AdaptIVe , CityMobil2, InterACT, HumanDrive, L3PILOT , and its successor HiDrive, where she leads the User SubProject. Professor Merat is Chair of the Transportation Research Board sub-committee on Human Factors in Road Vehicle

Automation; and is an advisory board member of over 15 organizations, including Veoneer, the UK's Highways England, and Chemitz University's Hybrid Societies research program.



Dr. Yael Shmueli GM

Dr. Yael Shmueli is senior researcher in the User Experience Technologies group in General Motors' R&D labs, Israel. She holds an MSc in HCI and a PhD in Cognitive Science, from University College London. Prior to joining GM, she has worked for 10 years as a UX designer on expert and information systems. At General Motors, her main focus is on the design of automated and autonomous vehicles, with special

emphasis on multimodal interface design and naturalistic user experiments.