

Is Statistics giving you fits? How to think about data and statistical methods for driver behavior and safety in a changing transportation world

Carol Flannagan

Research Professor and Director of the University of Michigan Transportation Research Institute's data group

Discussions of measuring and assessing safety in Automated Driving Systems (ADS) have focused heavily on measuring the ADS' driving environment and comparing its performance to aggregated crash risk for human drivers. However, measuring driver behavior itself is critical to assessing L3 system safety.

This talk will cover a variety of issues and potential solutions in measurement and statistical assessment of safety in the world of L3 automation, without going into any math. Measurement issues include how to gather data without requiring a server in every vehicle. Statistical assessment issues include: separating driver and vehicle contributions to safety, making fair comparisons to human-driver safety, and thinking about assessment of a vehicle whose performance and capability is changing over time.