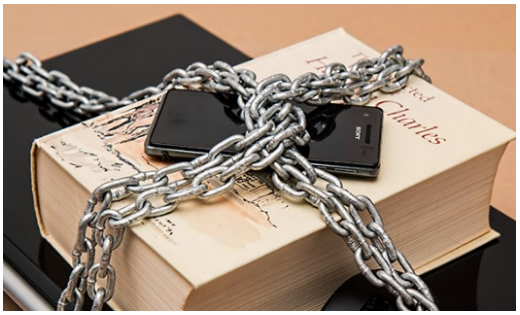

Security Lancaster | Lancaster University

SL-IS Seminar

Automated Vehicle Safety Overview for 2021

Philip Koopman
CMU (Carnegie Mellon University)

Date: Feb 12th, 2020
Time: 14:00 – 15:00
Teams Link: Join Seminar (We'd appreciate if you could optionally register to join our mailing list)

Abstract:

Various types of vehicle automation are being deployed on public roads, including vehicles that do not have continuous human driver supervision. This talk summarizes the state of safety in this industry, covering: types of vehicle deployments, what "safe" might mean for current deployments, challenges with human driver involvement, technology challenges, a snapshot of the standards landscape, and what it might take to deploy this technology at scale safely.

Bio:

Philip Koopman, Ph.D.- Co-founder and Chief Technology Officer - Edge Case Research

Prof. Philip Koopman is an internationally recognized expert on Autonomous Vehicle (AV) safety who has worked in that area at Carnegie Mellon University for 25 years. He is also actively involved with AV safety policy, regulation, implementation, and standards. His pioneering research work includes software robustness testing and run time monitoring of autonomous systems to identify how they break and how to fix them. He has extensive experience in software safety and software quality across numerous transportation, industrial, and defense application domains including conventional automotive software and hardware systems. He served as the lead author of the ANSI/UL 4600 standard for autonomous system safety.

About Edge Case Research

Founded by Michael Wagner and Philip Koopman, Ph.D., recognized world leaders in autonomous system safety as a trusted, independent third-party source to assess and develop safe autonomous systems. Established in 2014 with a renowned team of leaders in self-driving car projects with successes dating back to where it all began - Carnegie Mellon in the 1990s. Edge Case offers products and services built on best practices to reduce time to market and the cost of validation while still achieving a robust safety goal. Our intelligent safety assessment platform, Hologram, automates Edge Case's safety expertise to support fast-paced, data centered, deep learning development for mission critical applications. Hologram increases the speed and accuracy of finding edge cases in perception systems; the leading product in helping clients mitigate the safety risks. Edge Case is headquartered in Pittsburgh with an office in Munich, Germany. See more information at https://www.ecr.ai

Please contact Jennifer for any Teams connectivity issues: j.mcculloch@lancaster.ac.uk