ECKERT SEAMANS

Artificial Intelligence, Robotics, and Autonomous Transportation Systems

OVERVIEW

Artificial Intelligence (AI), simply put, is the use of science and engineering to create increasingly capable intelligent systems that will benefit society. AI will not supplant human intelligence, rather, it will augment our intellectual reach. In the process, AI will enable the creation of safer, more efficient, and more reliable systems that will, in many instances, drive down societal costs associated with mistakes in human behavior. This is particularly true in the area of autonomous transportation systems – highly autonomous and intelligent systems represent the future of mobility.

We recognize that AI-driven systems touch nearly every aspect of our lives – from smart trains, planes, and automobiles using autonomous transportation systems to cell phone technology and wireless technology using V2V and V2I networks, infotainment and gaming, nano-technology, medical devices, surgical robots, pharmaceuticals, and food. It is impacting the delivery of legal services, manufacturing – robotics, health care delivery (diagnosis and treatment), DNA synthesis sequencing and genomics, banking and finance, online retail sales and customer service, predictive purchasing, and applications for smart homes.

Al is guiding, perhaps driving, these industries into the future and along the way, the companies that are developing the underlying AI technology, as well as the industries utilizing this technology, require the advice of capable legal counsel. Eckert Seamans is a firm of diverse practice groups who work collaboratively across our offices to develop solutions for companies developing or utilizing AI technology. We have represented companies in these industries by providing advice in the following areas:

- Product Liability/Commercial Litigation & Counseling
- Cybersecurity, Data Security, and Privacy
- Insurance/Risk Management
- Regulatory/Government Affairs
- Intellectual Property/Software Technology & Licensing
- Aviation & Unmanned Aircraft Systems
- Transportation/Public Transit
- Telecommunications
- Health Care
- Labor/Employment and Employee Benefits
- Municipal Law & Governance
- Environmental, Health, and Safety
- Alternative Energy/Renewables & Clean Technology

Our primary focus is on providing these services to meet the needs of robotics/software engineering companies developing AI technology and manufacturers that employ this technology in the automotive, trucking, rail, aviation, agricultural, and maritime industries as well as manufacturing companies using AI/robotic technology in the medical device, pharmaceutical, health care, consumer product, food product, and industrial product, chemical, and heavy industries.

AI RESOURCES

• American Association of State Highway Officials: Fast Act Reauthorization

- Governors Highway Safety Association: <u>Autonomous Vehicles Meet Human Drivers: Traffic Safety</u>
 <u>Issues for States</u>
- Insurance Institute for Highway Safety:
 - <u>ADAS Reality Check</u>
 - Headwinds on the Road to Zero: ADAS, crashworthiness and macro effects
- Mobileye: On a Formal Model of Safe and Scalable Self-driving Cars
- National Highway Traffic Safety Administration:
 - 2016 Fatal Motor Vehicle Crashes: Overview
 - 2016 Quick Facts
 - 2017 Fatal Motor Vehicle Crashes: Overview
 - Automated Driving Systems 2.0
 - Cybersecurity Best Practices for Modern Vehicles
 - Fatality Analysis Reporting System Encyclopedia
 - $\circ~$ Human Factors Design Guidance for Level 2 and Level 3 Automated $\,$ Driving Concepts $\,$
 - Preliminary Statement of Policy Concerning Automated Vehicles
 - <u>Voluntary Safety Self-Assessment</u>
 Company VSSA Disclosures: Nuro, Waymo, GM, Ford, Nvidia, and Uber
- Nature International Journal of Science: <u>"The Moral Machine Experiment"</u>
- New York City Department of Transportation: NYC DOT Connected Vehicle Pilot (Video: <u>Part 1</u>, <u>Part 2</u>, <u>Part 3</u>)
- Pennsylvania Department of Insurance:
 - <u>Letter to U.S. Department of Transportation re: Request for Comment regarding Automated</u> <u>Vehicles 3.0</u>
- Pennsylvania Department of Transportation:
 - <u>Automated Vehicle Testing Guidance</u>
 - Letter to U.S. Department of Transportation re: Request for Comment regarding Automated Vehicles 3.0
- RAND Corporation: Autonomous Vehicle Technology: A Guide for Policymakers
- SAE International: <u>Taxonomy and Definitions for Terms Related to On-Road Motor Vehicle</u> <u>Automated Driving Systems</u>
- Securing America's Future Energy: Findings of the Commission on AV Testing and Safety
- University of Virginia Center for Transportation: <u>Glossary of Connected and Automated Vehicle</u>
 <u>Terms</u>
- U.S. Department of Transportation:
 - <u>Connected Vehicle Pilot Deployment Program</u>
 - Notice of Request for Comments Preparing for the Future of Transportation Automated Vehicles 3.0
 - <u>Pilot Program for Collaborative Research on Motor Vehicles with High or Full Driving</u> <u>Automation</u>
 - Preparing for the Future of Transportation: Automated Vehicles 3.0 (AV 3.0)

NEWS AND INSIGHTS

Publications

AI/Robotics/Autonomy

• Autonomous Vehicle Legislative Survey - October 2019 Edition, compiled by Jodi Dyan Oley, Karen

<u>O. Moury</u>, and Monakee D. Marseille, updated quarterly since October 2018.

- <u>"How AI Will Change Environmental Compliance,"</u> by <u>David A. Rockman</u>, Bloomberg Environment, October 2018.
- "Insurance In The Age of Vehicle Autonomy And Ride-Sharing," by <u>Robert V. Campedel</u>, Law360, September 2018.
- "<u>Product Liability For Online Marketplaces And Car-Sharing</u>," by <u>Steven R. Kramer</u>, Law360, September 2018.

Product Liability

• <u>"The Next Big Thing May Be Very Small"</u> by <u>Steven R. Kramer</u>, National Law Journal, April 2007.

Trials

- <u>"How Binding Is That 30(b)(6) Testimony?</u>" by <u>Steven R. Kramer</u>, Law360, July 2018.
- <u>"Corporate Designee Practice Under NY V. Federal Rules,"</u> by Steven R. Kramer, Law360, April 2018

Speaking Engagements

• Dennis P. Ziemba served as a panelist for "A Design Process for Autonomous Vehicle Decisionmaking Frameworks," and <u>Steven R. Kramer</u> for "Advanced Driver Assistance Systems" at the Product Liability Advisory Council (PLAC) Fall Conference, November 2018.