Year 3 Awarded Projects

University of Massachusetts Amherst

AI-Enhanced LiDAR Tools for Smart Bridge Clearance Assessment and Obstacle Detection
PI: *Dr. Simos Gerasimidis*

Crash Analysis at Intersections with Transit Signal Priority
PI: *Dr. Eleni Christofa, Dr. Michael Knodler, Dr. Francis Tainter*

Deskilling or Redefining? Drivers' Hazard Anticipation with Automation
PI: *Dr. Anuj Pradhan*

Development of a Network-Level Data-Driven High Friction Surface Treatment Location Selection Approach Leveraging Remote Sensing Technologies
PI: *Dr. Chengbo Ai, Dr. Simos Gerasimidis*

Improving Teen Driver Safety, Evaluating Educational Interventions to Reduce Overreliance on Advanced Driver Assistance Systems
PI: *Dr. Isabelle Coppa Wandenkolk, Dr. Shannon Roberts, Dr. Niloufar Shirani*

Intervention Strategies to Enhance Motorcoach Seatbelt Use
PI: *Dr. Michael Plotnikov*

Investigating Transit Characteristics and Road Safety Outcomes
PI: *Dr. Jimi Oke*

Leveraging AI for Risk-Informed Culvert Infrastructure Decision-Making
PI: *Dr. Jessica Boakye, Dr. Sadegh Asgari*

Measuring and Modeling Safety & Congestion Impacts of Double Parking
PI: *Dr. Eric Gonzales*

Obtaining Reliable Pavement Friction Measurements Using Connected Vehicles
PI: *Dr. Egemen Okte, Dr. Walaa Mogawer*

Ride-Sourcing Demand and Supply Estimation Based on Coarse Public Data (Phase II)
PI: *Dr. Song Gao*

University of Connecticut

AI-Powered Conflict Detection and Signal Optimization for Right Turn FYAs in Mixed Modal Intersections
PI: *Dr. Shan Zuo*

Explaining Visual Attention for Autonomous Vehicle Controllers
PI: *Dr. Jinbo Bi*

Improving Teen Driver Safety, Evaluating Educational Interventions to Reduce Overreliance on Advanced Driver Assistance Systems
PI: *Dr. Isabelle Coppa Wandenkolk, Dr. Shannon Roberts, Dr. Niloufar Shirani*

Promoting Automated Vehicle Safety Using Multimodal Data and Large Language Models
PI: *Dr. Wei Zhang*

Spatio Temporal Graph Learning for Real-Time Pedestrian Exposure Estimation
PI: *Dr. Fatemah Fakhrmoosavi*

STEER AV - Safety Tuned Emulation of Emerging Responses for Autonomous Vehicles
PI: *Dr. Monika Filipovska*

Synthesizing Microtransit and Fixed-Route Transit via Rider Hand Off to Improve Transit Efficiency
PI: *Dr. Young Joun Ha*

Using Linked Data to Explore the Accuracy of Crash-Reported Injuries of Minors
PI: *Marisa Auguste*

Norwich University

Assessing Healthcare Transportation Access in a Rural Vermont Community
PI: *Dr. Moses Tefe*

Mobility and Safety Needs Assessment. A Case Study of Northfield, VT (Phase II)
PI: *Dr. William Lyons, Dr. Moses Tefe*

Obstacles to the Widespread Implementation of Autonomous Vehicles in Vermont
PI: *Dr. Michael Cross*

University of New Hampshire

Sensor Networks for Vulnerable Road User Safety (Phase III)
PI: *Dr. Nicholas Kirsch*