experiments

RoadLAB scientists instrument modern vehicles in which driver maneuvers, instrumentation operations, eye gaze direction, facial expressions, and head pose are recorded in realistic driving environments. These experiments reveal the ways in which driver intent may be predicted. Driving assistance systems capable of predicting intent can intervene when expected maneuvers render a driving situation unsafe. Driver behavior relates to context and our experimental technologies are designed to elucidate this relationship.

research

The scientists at RoadLAB conduct research aimed at understanding driver intent, to develop better and more effective automated driving assistance systems. Behavior and its prediction are paramount to safety improvements. Because a vast majority of accidents are due to human error, drivers ought to be pivotal elements in the next generation of assistance systems. It is through the knowledge of drivers that automated assistance may drastically reduce injuries, fatalities and their associated costs.

partnerships

Are you involved with automotive safety research? Our team is actively analyzing experimental data and sharing results with the auto industry. At RoadLAB we firmly believe applied research is valuable when performed within the context of corporate innovation.

Interested firms and research institutions can obtain more information on mutual agreements and R&D partnerships by contacting us at: research@roadlab.org
. initiative
Driving perhaps embodies the most prevalent form of mobility in modern societies and continues to rise in popularity. Increasing traffic densities in mega-cities and highways pose new and challenging threats to safety. Advanced driving assistance systems represent innovative solutions to these concerns.

. mission
Our aim at RoadLAB is nothing less than the development of automated assistance systems cognizant of driver behavior, intent, surrounding traffic, and general conditions to drastically reduce injuries caused by accidents and their social and economic costs.

. technology
Our scientists are hard at work developing tomorrow's technologies that will provide enhanced driving safety and comfort. Very few human activities are as perilous as driving. At RoadLAB, we aim to drastically change this.

. contact
Prof. Dr. Steven Beauchemin
RoadLAB Research Director

Prof. Dr. Michael Bauer
RoadLAB Research Associate
V2V Communication

Prof. Dr.-Ing. Denis Laurendeau
RoadLAB Research Associate
Computer Vision

Prof. Dr. Normand Teasdale
RoadLAB Research Associate
Psycho-physics

E-mail: research@roadlab.org
Phone: +1 (519) 661-2073
Fax: +1 (519) 661-3515