DTRAS

DIGITAL PLATFORM FOR TRAFFIC SAFETY-RISK PREDICTION IN RURAL AREAS

Digital Platform for Traffic Safety-Risk Prediction in Rural Areas

Motivation

Establish novel AI-based approaches to increase the safety of road users through artificial intelligence

Target Group: Vehicle Drivers

Regions: Styria (Austria) and the Harz Mountains (Germany)

Mission

- Cooperate with leading German partners from the mobility data domain, securing their R&D position in the automotive sector.
- Establish a testbed with multi-modal vehicle sensor data at VIF to be used as a research infrastructure for exploring novel approaches, e.g. in research-oriented, non-funded services.
- Extend its software development competencies, e.g. concerning the integration of different data sources into digital platforms.
- Enhance the competencies of VIF in the fields of digitisation, platform architectures, data aggregation, AI models, mobile applications, user interface development, and Data Science, to strengthen the automotive industry.
- Allow a transfer of knowledge to future projects with OEMs and TIER-1 suppliers, in particular for the development of safety functionalities within vehicles.

Project Approach

Project Management

- Coordination
- Project Reporting

Concept, System and Platform architecture

- Traffic Risk assessment concept
- System and platform architecture

Data interfaces and safety relevant information computation

- Establish vehicle data acquisition mechanisms
- Establish interfaces to the platforms of data intermediaries
- Compute traffic safety risk-related events on the edge
- Acquire and/-or compute traffic-safety-related events

Predictive AI Model and digital platform

- Set up a research infrastructure for traffic safety-risk assessment
- Predictive AI model development and training
- AI model implementation

Application scenarios and evaluation

- Development of traffic-risk visualization demonstrator
- Evaluation and proof-of-concept

Business model and dissemination

- Dissemination

ISC Chair of Information Security and Compliance, Göttingen University

Sustainable iM

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CARUSO dataplace

Chair of Information Security and Compliance
University of Göttingen
Platz der Göttinger Sieben 5
37073 Göttingen
E-Mail: strang@uni-goettingen.de

Chair of Information Management – Smart Mobility Group
University of Göttingen
Platz der Göttinger Sieben 5
37073 Göttingen
E-Mail: lkolbe@uni-goettingen.de