SIP-adus Workshop 2022



Human Factors: HMI and User Education **CAD GermanyJapan HF**

Overviews

Objectives of this collaboration

- · Accelerate successful introduction of safe automated vehicle technology.
- Increase social acceptance of automated systems for broader international markets based on cross-cultural comparisons and considerations of obtained results.

Japanese partners

Coordinator

· Satoshi Kitazaki (AIST)

■ Research Institutes

 Keio U(KO), AIST, U of Tokyo(UT), U of Tsukuba(TU), Kumamoto U(KU)

German partners

Coordinator

· Klaus Bengler (TU Munich)

■ Research Institutes

• TU Dresden(TUD), TU Chemnitz(TUC), TU Munich(TUM), DLR, Ulm U(UULM)

Achievements

Task A / WP 1: External communication at low speeds

For more info



Members

- KO: External HMI and vehicle behavior, effects of road markings for Low-speed AVs.
- TUD: Effects of eHMIs on interaction between AVs and pedestrians.
- TUC: Interaction between cyclists and AVs.
- TUM : Communication strategies of AVs addressing vulnerable road users.
- DLR: Modeling pedestrians' decision-making and behavior & design of eHMIs.
- · UULM: Interaction between automated driving systems and drivers outside the vehicle.

■ Joint Publications: 2 (under writing)

Task B / WP 3: Driver's interaction with the system

For more info



Members

- · AIST: Design guidelines for the driver to build proper situation awareness.
- UT: Evaluation method for driver's understanding of system functional limitations.
- TUM: Effects of driver interaction during transition phases with MRMs.
- UULM: Interaction between automated driving systems and drivers inside the vehicle.

■ Joint Publications: 2 (under writing)

Task C / WP 2: Education and training of users

For more info



- TU: General knowledge education is important for drivers to use AD safely.
- · KU: Video teaching materials were developed based on effective educational methods.
- TUD : Literature review on effectiveness of training for automated driving.
- TUM: Effect of training on users' knowledge about automated driving (L1 to L3).

Others

Lecture exchange, staff exchange, organized session (IEA2021)