

K. NAKANO LAB.

[Measurement and Control in Mobility]

Advanced Mobility Research Center

Mechanical and Biological Systems Control

Mechanical Engineering, Interdisciplinary Information Studies

http://www.knakanolab.iis.u-tokyo.ac.jp/english/index_en.htm

While attention on automated driving of automobiles increases, aiming for augmentation of a driver, human oriented mobility engineering researches such as shared control, human-machine interface, and high level sensing have been conducted. The followings are topics of our researches.

- 1. Research and Development of Human Machine Interface for Driver Initiated Take-over
- 2. Evaluation of Performance of Shared Control
- 3. Driver Model for Shared Control
- 4. Steering Control Using sEMG
- 5. Effect of In-Vehicle Traffic Signal on Driving Behavior
- 6. Steering Controller Design of Automated Driving Bus
- Dynamic Driving Task Fallback System for an Automated Vehicle Encountering Sensor Failure in Monitoring Driving Environment
- 8. Energy Harvesting in Rotating Body
- 9. Decreased Deceleration Detection of Railway Vehicle in Snow Condition
- 10. Estimation of Condition Between Rail and Wheel from Measured Values of a PQ Wheel
- 11. Unified Traffic Control System for Railway and Road Vehicles Using Mobile Phone Line
- 12. Building the Method for Social Implementation of Automated Driving Technology Complying with Actual State Based on ELSI



