Vehicle Dynamic Control Strategy of Automated Driving

[For Safer and More Comfortable Automated Driving Technology]

Corporate Sponsored Research Programs

Dynamics and Control of Vehicle
Human-Machine Systems
Mechano-Informatic Mobility Engineering

Sponsored by
JTEKT Corporation

Vehicle Dynamic Control

Robust Control against Disturbance and Modeling Error

Prevent Over-Trust on AD/ADAS

Towards the Evolution of Automated Driving

Expand ODD (Operational Design Domain)

Vehicle motion control utilizing the characteristics of Personal Mobility Vehicle

Lower Implementation Cost

Environment and Driver Monitoring using Cameras and Biological Sensors

HMI
Human-Machine Interface

HMI to Encourage Driver’s Spontaneous Behavioral Change

Driving simulator experiment

Vehicle Dynamic Function for Automated Driving (AD) fusing

- Human-Machine System
- AI and Other Advanced Technology

Better performance (precision, response) in AD control

More Reliability in AD
Affluent Society where People Can Move Safely in Peace

Academic Contribution

Professor Y. SUDA
Project Prof. T. HIRAOKA
Project Assoc. Prof. S. ONO
Project Research Assoc. K. SHIMONO

Institute of Industrial Science, The University of Tokyo