

## K. NAKANO LAB.

## [Measurement and Control in Mobility]

Advanced Mobility Research Center

Mechanical and Biological Systems Control

Interdisciplinary Information Studies, Mechanical Engineering

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.

Effect evaluation of haptic guidance control

Haptic guidance control considering change of look-ahead distance

Haptic guidance control under passive fatigue

Estimation of drowsiness of drivers with haptic interface

Effect of Inter-vehicle traffic signals at signalized intersections on driving behaviors

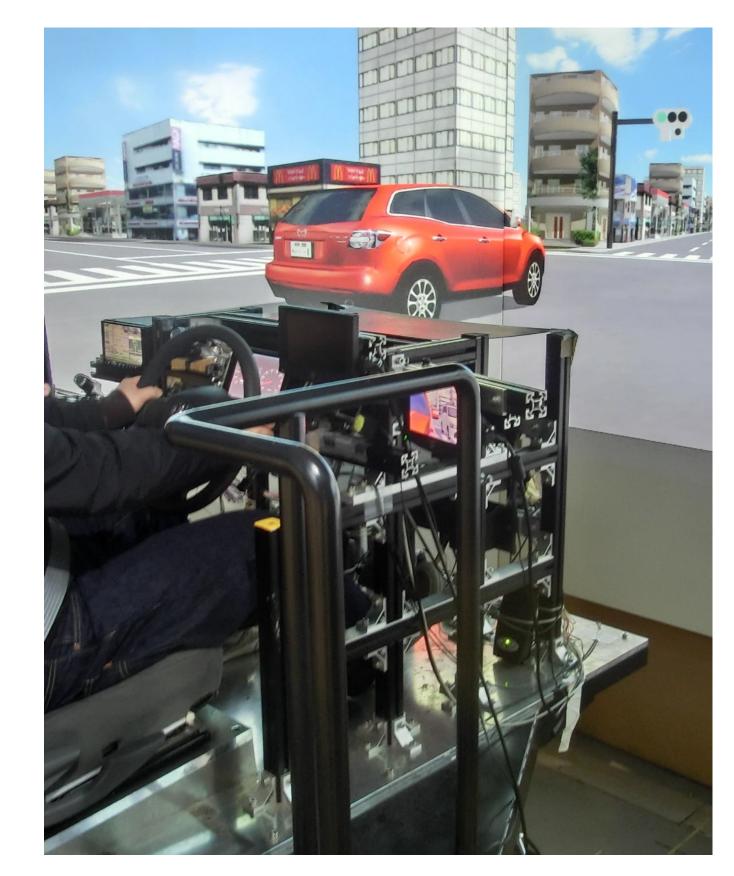
Application of Inter-vehicle traffic signals at non-signalized intersections

Traffic control with inter-vehicle traffic signals and road signs

Energy harvesting in rotating tires using stochastic resonance

## Measurement and control in railway vehicles

Independent component analysis applied to measurement of vehicle vibration









Vibration Analysis with ICA



Railway Electric Cart



Experimental Traffic



Energy Harvester in the



