Generating Behavior under Uncertain Intention of Traffic Participants

In cooperation with the Audi AG, our team at fortiss GmbH (An-Institut of the Technische Universität München) develops new motion planning approaches for autonomous vehicles.

Description

In urban environments, uncertainty about the environment due to uncertainty about intention and maneuver of other traffic participants introduce challenges, that need to be accounted for in the behavior generation problem. Traditional approaches considering actions based on worst-case assumptions and predictions have shown to provide too conservative or even infeasible results. This thesis aims to generate behavior, that takes the uncertainty in the prediction of other agents into account to allow for safe motion.

For further information, feel free to contact me.

What we offer

- Interdisciplinary working environment
- Possibility to use student work space at fortiss (close to Munich city center)
- Flexible working hours
- Opportunity to contribute to research projects and publications

Your Application

- Transcript of Records
- Curriculum Vitae
- Motivation Letter
- Certificate of Enrollment

Further Information

Only students of the Technische University München can be supervised.

This thesis offer does not ideally match your interest? Propose a different topic to us.

Fortiss GmbH

An-Institut der TU München

Technische Universität München

Fakultät für Informatik

Lehrstuhl für Echtzeitsysteme und Robotik

Supervisor:
Prof. Dr.-Ing. Alois Knoll

Advisor:
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Type:
MA

Research area:
Autonomous Driving

Programming language:
Matlab

Required skills:
Motion Planning, Numerical Optimization

Language:
English

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