

Motion Planning for Autonomous Vehicles

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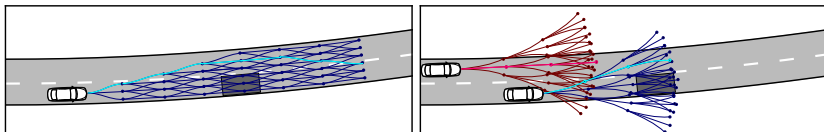
Goal: Introduction to current problems in the field of autonomous driving through hands-on projects.

Structure:

- You will work as part of a team on a project throughout the semester.
- Each topic will be supervised by a member of our chair.
- There are no weekly lectures, but irregular meetings throughout the semester.
- The topics of the projects will be distributed at the beginning of the semester.

Tasks:

- Literature research
- Implementation of an application related to the field of autonomous driving, e.g. realization of a motion planner, design of a maneuver automaton.



- Test case generation and evaluation.

The main programming language is Python. We will provide basic software modules in Python, e.g. collision checker, representation of a scenario.

Prerequisites: You should be self-motivated, creative, and able to work as part of a team. Preferably, you have experience with one or more of the following:

- Motion planning
- Dynamics
- Python

Grading Criteria:

- Intermediate and final presentation
- Report
- Code

Please send your grade report and a brief letter of motivation (max. 15 lines) to stefanie.manzinger@in.tum.de until 20.07.17.

Registration:

- TUM Matching Platform (14.07. to 19.07.17)
- Maximum number of participants: 20

Any questions?