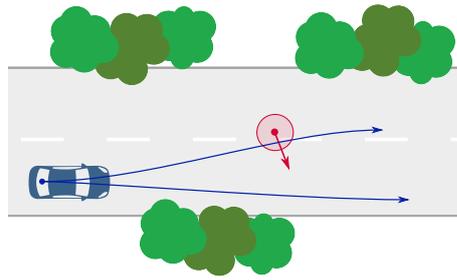


Learning “Intuition” in Motion Planning



As autonomous vehicles strive for Level-5 autonomous driving, novel motion and behavior planning methods have to be developed in order to solve the remaining challenges. We work together with the AUDI AG in order to find solutions for the future.

In this thesis a motion/behavior planner should be implemented that tackles difficult planning problems, such as inner city lane merging or negotiation tasks. In particular, these methods are of special interest:

- Optimization/Search-based Methods
- Supervised-Learning
- Reinforcement-Learning
- Unsupervised-Learning

For further details, please contact me via E-Mail.

Requirements

- Solid programming skills in C++
- Good knowledge of Python
- Knowledge of Tensorflow/PyTorch
- Able to work independently



Technische Universität München



Fakultät für Informatik

Lehrstuhl für Echtzeitsysteme
und Robotik

Supervisor:

Prof. Dr.-Ing. Alois Knoll

Advisor:

Patrick Hart, M.Sc.

Type:

MA

Research area:

Motion/Behavior-Planning,
Machine Learning

Programming language:

C++, Python

Language:

English

**For more information please
contact us:**

Phone: +49.89. 3603522. 322

E-Mail: hart@fortiss.org

Internet: www6.in.tum.de