

To all interested students



Student Assistant – Machine Learning & Computer Vision – Trajectory Prediction & Data Fusion

We are looking for a student (m/f/d) to support with the implementation of simple computer vision (CV) algorithms for data fusion and the implementation of existing deep learning methods in the field of trajectory prediction. Objectives include the improvement of data recording in the context of the "[Testfeld Autonomes Fahren](#)", as well as the application of state-of-the-art prediction models to the data collected there.

Tasks

- Application and adaptation of open-source trajectory prediction models to real-world traffic data
- Implementation of multi-camera detection & tracking on real-world traffic data
- Implementation of scripts for data pre- and post-processing

We offer

- Professional supervision
- Exciting activities and insights into the topic of autonomous driving
- Up to 40 hours / month (duration: 6 months, extension possible)

We expect

- Good understanding of machine learning methods, especially neural networks
- Basic understanding and best practices in software architecture / design
- Good practical experience with Python
- Good practical experience with PyTorch (or TensorFlow)
- Optional: Basic knowledge of computer vision
- Optional: Practical experience with ROS (Robot Operating System)
- Enjoy learning new technical methods, as well as literature research

Required documents

Cover letter (3-4 sentences), short CV (max. 2 pages), excerpt of current academic achievements

Send applications to muetsch@kit.edu.