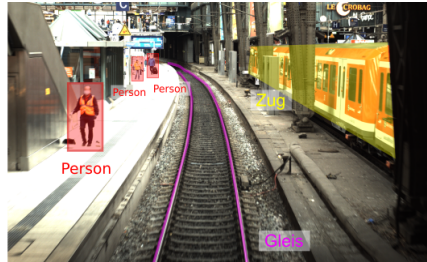
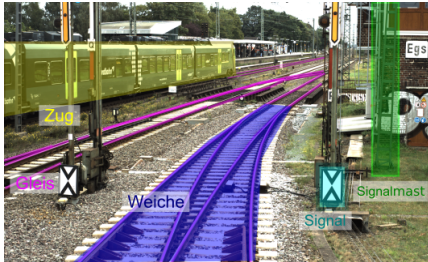


## Open position



## Student Assistant (HiWi)

### Baseline Models for Novel Benchmark Suite

To advance the mobility transition and expand the capacities in rail transport, automated systems are needed that improve the scheduling, punctuality, and safety of trains. For this purpose, the Institute of Measurement and Control Systems (MRT) is developing a benchmark suite that will support researchers in advancing AI models for environmental perception.

A central component of this benchmark suite will be challenges such as object detection, object tracking, and ego-motion estimation. For each challenge, the benchmark will provide a novel dataset with corresponding annotations.

We are looking for a student assistant to support us in training and/or testing baseline models for these challenges. The position also includes general data processing tasks.

You should be familiar with python programming and have prior experience with training deep learning models.

Working hours are flexible and can be adapted to your university schedule. Remote work is also possible.

Are you interested in contributing to the automation of railway transport and supporting the shift toward sustainable mobility? Would you like to gain hands-on experience in training modern AI models? I'd be happy to answer any questions. We look forward to your application!

**Institute of Measurement  
and Control Systems (MRT)**  
Prof. Dr.-Ing. Christoph Stiller

#### Advisor:

Annika Bätz, M.Sc.

#### Required skills:

- Experience in training AI models in Python (ideally PyTorch)
- Structured and reliable work approach
- Work independently

#### Language(s):

German or English

For more information please contact:

#### Annika Bätz

Phone: +49 721 608-44071

Email: annika.baetz@kit.edu

Or directly send in your application including your **current grades** and your **CV** as well as our **questionnaire**! If possible, we would also appreciate a short example of your previous work - such as a GitHub link or a small code snippet showcasing your experience with Python and deep learning.

