

## Open position



Railway scenes with labeled objects

## Student Assistant (HiWi)

### Labeling for Automation of Railway Traffic

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 can be used to research AI models for environmental perception in railway scenarios. A potential future application of those models is automatic detection of dangerous situations such that a train can be slowed down as quickly as possible.

A core component of our benchmark suite is an image dataset that depicts various railway scenes. In order to train AI models on this data, various objects, such as tracks, trains, and people, must be labeled. Labeling in this context means that specific areas of the image are marked and given a description.

We are looking for a student assistant to help us create these labels. Knowledge in the field of AI or programming skills are **not** required; rather, you should have an eye for detail and be able to work independently and reliably. Your field of study is not relevant. The working hours are flexible, can be adapted to your university schedule and you can work from home if you want.

Are you interested in contributing to the automation of railway traffic and thereby supporting the transition to sustainable transportation? Would you like to learn more about the training of modern AI models? I am happy to answer any questions you might have. I look forward to your application!

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

#### Advisor:

Annika Bätz, M.Sc.

#### Required skills:

- Attention to detail
- Structured and reliable work approach
- Work independently

#### Language(s):

German or English

For more information please contact:

#### Annika Bätz

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Or directly send in your application including your current grades as well as our questionnaire!

