



With us, you don't just talk the talk, you walk the walk.

Change starts with us.

Student Assistants (w/m/d) – Deep Reinforcement Learning for Industrial Applications

The Fraunhofer-Gesellschaft (www.fraunhofer.com) currently operates 76 institutes and research institutions throughout Germany and is the world's leading applied research organization. Around 30 800 employees work with an annual research budget of 3 billion euros.

The **»Self-Learning Systems«** group at Fraunhofer IIS is part of the »Precise Positioning and Analytics« department and located at the institute's Nuremberg site. Our team members have diverse academic backgrounds from computer science and engineering to physics. We combine expertise in a range of advanced machine learning (ML) topics. One of our research goals is to provide robust and safe algorithmic solutions for control and decision-making tasks for systems in complex dynamic environments. To this end, we employ deep learning in combination with reinforcement-learning techniques. We research dependable reinforcement learning, i.e., we want to learn behaviors that are safe, performant, and explainable for many different tasks. There is a lot to learn and develop on the way and we are eager to hear about your ideas.

You are interested in making artificial intelligence useful for industrial application? Then have a look at our offer!

What you will do

- You will create and maintain evaluation environments for diverse use cases
- You help optimizing business and production processes
- You implement and compare state-of-the-art approaches for reinforcement learning
- You support in search and review of relevant literature
- You take part in public presentations and publications

What you bring to the table

- You study computer science, engineering, physics, mathematics or a similar program
- You have some ML experience and already worked with ML frameworks (e.g. Pytorch)
- You are interested in deep reinforcement learning
- You ideally possess some experience in working with graph neural networks
- You are proficient in English and/or German

What you can expect

- Flexible working hours
- **Open** and **friendly teamwork**
- Varied tasks with room for creativity
- Exciting **seminars** and **events**
- **Networking** with scientists
- Active contribution in applied research
- Interesting and innovative projects
- **Mentoring program** <u>»josephine®«</u> for talented female students

Weekly working hours are determined by agreement. You can start from now on (as a student assistant from **10** to **20** hours a week. You can reduce your hours before exams and increase them during semester breaks. You can flexibly determine the working days.

We value and promote the diversity of our employees' skills and therefore welcome all applications - regardless of age, gender, nationality, ethnic and social origin, religion, ideology, disability, sexual orientation and identity.

Interested? Apply <u>online</u> now (PDF: cover letter, CV, transcripts). We look forward to getting to know you!

Fraunhofer-Institute for Integrated Circuits IIS www.iis.fraunhofer.de/en

Requisition Number: 1552242Application Deadline: noneLocation: Nürnberg

