

CAN I COMBINE SCIENCE AND BUSINESS IN A SINGLE JOB?

YES.

We'll show you how at Fraunhofer IIS.

For the »Self-Learning Systems« group in **Nuremberg**, the Fraunhofer Institute for Integrated Circuits IIS is currently seeking a

Student Assistant

for DEPENDABLE DEEP REINFORCEMENT LEARNING

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, engineering and physics. We combine expertise in a range of advanced machine learning 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. These techniques are only useful when combined with methods for reliable and interpretable artificial intelligence (AI).

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 want your help!

You are interested in making **artificial intelligence safe and trustworthy**?
Then we have the perfect opportunity for you!

Your tasks:

- You develop your skills and knowledge about Reinforcement Learning
- You will create and maintain evaluation environments for safe reinforcement learning
- You will implement and compare state-of-the-art approaches for safe and explainable reinforcement learning
- You will work on strategies towards interpreting or verifying reinforcement learning behaviors
- You research and implement teacher advice strategies that allow for safe training

Your profile:

- You are currently enrolled in a computer science, engineering, physics or mathematics program
- You have some machine learning (ML) experience and have already worked with ML frameworks (e.g. Pytorch)
- You are interested in deep reinforcement learning
- You speak English and/or German fluently

What you can expect from us

- An **open and cooperative** working environment
- Collaboration in **interesting and innovative projects**
- Many opportunities to gain **practical experience and attend seminars**
- Flexibility concerning your working hours

Interested?

Please apply for this position using the following link: <https://recruiting.fraunhofer.de/Vacancies/54895/Description/2>.

Applications are possible in German and English. Please include a cover letter, your CV and your latest transcripts of records (as PDF) and quote ID number **54895-LV**. Address your application to Nina Wörlein.

Please let us know how you learned about this job opportunity.

Additional information is available on our website: www.iis.fraunhofer.de/en