

Position: Student Assistant in Reinforcement Learning (RL)

Location: System Security Lab at TUDa

Work Mode: On-site or Remote

About System Security Lab:

The System Security Lab is a leading digital security and AI research spot located at the Technical University of Darmstadt. We've helped make digital activities safe. Being a part of our team means you're at the heart of new digital safety methods powered by AI. If you're excited about turning challenges into new discoveries, then our lab is the right place for you.

Your Mission:

As a Student Assistant for RL, you will delve deep into the world of reinforcement learning with human feedback. Your primary role involves assisting in developing and fine-tuning RL models under the guidance of our experienced AI scientists. You will be involved in various stages of the machine learning process, such as model training, optimization, and initial deployment tests.

Your Profile:

- **Reinforcement Learning Expertise:** A solid foundation in RL, with exposure to state-of-the-art techniques, including Proximal Policy Optimization and Actor-Critic methods.
- **Deep Learning (DL) Frameworks:** Hands-on experience with at least one DL framework, e.g., TensorFlow, PyTorch, or Keras, and familiarity with RL libraries.
- **Hands-on experience with end-to-end RL with Human feedback (RLHF) pipelines** (e.g., DeepSpeed-Chat)
- **Coding Skills:** Proficiency in Python and comfortable with libraries relevant to machine learning and data processing, such as Pandas, Numpy, and Scikit-learn.
- **Communication:** Fluent in English, both in writing and verbal communication.
- **Technical Know-how:** Understanding neural network architectures, including transformers, would be advantageous.

Credentials:

- Currently pursuing a Bachelor's or Master's degree in Computer Science, Engineering, or a closely related field, with coursework or projects related to Reinforcement Learning.

Join Us:

We're not just offering a job. We're offering the chance to shape the future. If you are prepared to dive deep, innovate, and collaborate with some of the best minds in the academic world, then forward your resume, cover letter, and relevant project samples to Dr. Hossein Fereidooni at info@trust.tu-darmstadt.de. Use the subject line: Application for Student Assistant in RL - [Your Full Name].