

## Research Position (f/m/d) in Robot Learning for the Department "AI and Robotics"

For the department "AI & Robotics" at the Institute of Material Handling and Logistics (IFL) in the Karlsruhe Institute of Technology, we are looking for full-time academic staff (100 %) available immediately. A doctorate within the scope of the employment is desired.

### Job description:

In collaboration with the "InnovationsCampus Mobilität der Zukunft (ICM)," we aim to bring new technologies and innovations through excellent basic research in AI and robotics. The research in the AI & Robotics group focuses on developing novel AI systems for real robot applications for **manipulation tasks, e.g., grasping, pin-picking, and assembly**:

- Human-Robot Learning: imitation learning, interactive learning, teleoperation learning.
- Autonomous Robot Learning: active learning, uncertainty-driven learning, lifelong learning

### Qualifications:

- You have a very good degree (diploma/master's degree) in computer science, mechatronics, mechanical engineering, industrial engineering, or a comparable field.
- You have a very strong background and practical experience in **robotics and ML**.
- You have very good programming skills (e.g., Python, C++).
- You have previous experience in hardware-related programming of robots (e.g., with ROS).
- (Deep) Reinforcement Learning/Diffusion learning/ ISAAC SIM/ background is a plus.
- Your profile: highly motivated, independent with a high level of personal responsibility, communication and teamwork skills.

### Responsibilities:

- Pursuing good research with real robot applications
- Participation in industry projects for research transfer
- Participation in research projects
- Assistance in the implementation, revision, and creation of courses with interactive teaching formats

### What we offer:

- Close cooperation with other institutes, universities, and numerous industrial partners
- Self-determined development environment for own research topics with active support for the doctorate research project
- Flexible working hours
- Work in a young, interdisciplinary research team
- Possibility to do a doctorate



### Institute:

Institut für Fördertechnik und Logistiksysteme (IFL)  
AI & Robotics Department (AIR)

### Payment:

based on the collective agreement for the public service TV-L, E13.

### Contract period:

Initially 1 year with the prospect of extension up to 4 years

**Start:** Immediately

**Application deadline:**  
15.12.2024

### Contact person for content-related questions:

M.Sc. Edgar Welte  
[application-air@ifl.kit.edu](mailto:application-air@ifl.kit.edu)

### Application:

Please send your application in the form of **ONE PDF** and named as follow **your NAME\_AIR\_05.pdf** incl: (Motivation letter, CV, certificate, transcripts, state any previous robotics experience) by e-mail to:

[application-air@ifl.kit.edu](mailto:application-air@ifl.kit.edu)

KIT and ICM value the professional equality of women and men. We are therefore particularly pleased to receive applications from women. If suitable, severely disabled applicants will be given preferential consideration.