

PhD Positions in Physical AI & Robotic Learning

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*We are inviting applications for the **Doctoral Researcher** position in the **Physical AI Lab** at the Chair of Imaging and Computer Vision, Faculty of Electrical Engineering and Information Technology, RWTH Aachen University. Our group develops generalist robots that autonomously solve real-world long-horizon tasks.*

Your Responsibilities

The successful candidate will conduct research on learning-based robotic systems that perceive, reason, and act in complex environments. Possible topics include vision-language-action models, robotic world models, active perception, structured memory systems, human-robot cognitive alignment, hybrid imitation and reinforcement learning, and medical robotics. Your work will include developing methods, implementing and evaluating models, conducting experiments in simulation and with physical robots, publishing at top international venues, and contributing to the development of the group.

Your Profile

- An excellent master's degree in computer science, electrical engineering, robotics, or a related field
- Solid knowledge of at least one of the following areas, and ideally several: machine learning, computer vision, language models, robotics, diffusion models, reinforcement learning, or related fields
- Strong programming skills, with the ability to rapidly prototype, implement, and evaluate research ideas, preferably in Python and PyTorch
- High motivation, scientific curiosity, and the ability to work both independently and collaboratively
- Excellent communication skills in English; German is advantageous but not required

What We Offer

- The opportunity to join and shape a young and growing research group
- Close supervision and scientific mentoring and support for publications, conference participation, and academic career development
- Access to the newly built *NEURA Gym RWTH Aachen* with robots operating in real-world scenarios
- Access to extensive on-premises computing infrastructure, including around 120 GPUs and additional high-end GPU clusters available on demand
- Active collaborations with partners from academia and industry
- The full-time position corresponds to a pay grade of EG 13 TV-L

Application

Applications should be submitted by email by **1 September 2026** for the current application round. Please use the subject line "PhysicalAI_PhD_{LastName}" and include a CV, academic transcripts, a statement of research interests, and, if available, links to publications, thesis work, or code repositories.