



Paderborn University is a high-performance and internationally oriented university. Within interdisciplinary teams, we undertake forward-looking research, design innovative teaching concepts and actively transfer knowledge into society. As an important research and cooperation partner, the university also shapes regional development strategies. We offer our employees in research, teaching, technology and administration a lively, family-friendly and equal opportunity environment, a lean management structure and diverse opportunities. **Join us to invent the future!**

The **Faculty of Computer Science, Electrical Engineering and Mathematics** – Department of Electrical Engineering / **Control and Automation Technology** – offers, starting at the earliest opportunity, the position as a

Post-doctoral Researcher (f/m/d)

(Salary level E 13 TV-L)

with 100 % of regular working time for an employment period of three years. This is a position within the meaning of the Wissenschaftszeitvertragsgesetz (WissZeitVG), which is intended to contribute to further scientific qualification. We are looking for a post-doctoral researcher to develop safe, learning based control and navigation algorithms for autonomous aerial robots.

Position description and responsibilities:

- Research in learning-based control and navigation algorithms (such as reinforcement learning, MPC with learning, neural network-based control, data-driven control, and others) for autonomous robots
- Writing scientific papers for journals and conferences
- Contribution to teaching activities through control theory-related courses (usually 4 semester hours per week)
- Active contribution to the joint acquisition of third-party projects

Employment requirements:

- Scientific university degree (Master) and PhD degree in the field of electrical, mechanical or computer engineering, mechatronics, or related areas
- Solid knowledge of machine learning and system and control theory
- Programming skills in C/C++ or Python
- Experience with Robot Operating System (ROS)
- Very good command of English, both written and spoken
- A solid publication track record in peer-reviewed journals and conferences

We offer:

- An international group that seeks to push the boundaries of single and multi-agent robotic systems by leveraging autonomy towards smarter systems that will learn and interact with an environment
- A new research lab with a high-precision motion capture ground-truth camera system and multiple GPU-based workstations for learning, control, and AI algorithm design
- Work on highly relevant research topics and technologies
- Personnel development through further training opportunities

Applications from women are particularly welcome and, in case of equal qualifications and experiences, will receive preferential treatment according to state law (LGG), unless there are preponderant reasons to give preference to another applicant. Part-time employment is generally possible. Applications from disabled people with appropriate suitability are explicitly welcome. This also applies to people with equal opportunities in accordance with the German social law SGB IX.

Applications with complete documents (cover letter, CV with the full publication list, contact details of two references in a single PDF file: name_surname.pdf) should be sent by **29th of November 2024** quoting **reference number 6711** to erdal.kayacan@uni-paderborn.de.

Information regarding the processing of your personal data can be located at:

<https://www.uni-paderborn.de/en/zv/personaldatenschutz>.

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