



Paderborn University is a high-performance and internationally oriented university with approximately 18,000 students. 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 around 2,600 employees in research, teaching, technology and administration a lively, family-friendly, equal opportunity environment, a lean management structure and diverse opportunities.

Join us to invent the future!

In the Faculty of Electrical Engineering, Computer Science and Mathematics at the Department of Power Electronics and Electrical Drives (LEA) Engineering a position as

Student assistant (f/m/d) or Research assistant (f/m/d) with Bachelor's degree

(SHK or WHB depending on personal qualification)

In the scope of 9.5 up to 19 hours per week is open. Smaller work quotas are also possible by arrangement, e.g., to stay within marginal employment requirements. This is an employment initially limited to 6 months - an extension is presumed possible and desired.

Job description:

- Maintenance and further development of an open-source software toolbox for the simulation of electrical energy grids based on power electronic converters
- Maintenance and further development of open-source control algorithms, including reinforcement learning, for such energy systems
- Development of practically relevant use cases for benchmarking the simulation environment and the control algorithms
- Further development of a graphical user interface (GUI)
- Cooperative work with additional (student) co-workers within the above job tasks
- Technical documentation

Requirements of employment:

- Student of computer science, computer engineering, electrical engineering, mathematics, physics or similar
- Solid experience in modelling dynamic systems using ordinary differential equations
- Ideally prior knowledge in Julia
- Ideally prior knowledge in software versioning using Git

We offer:

- Self-dependent work process
- Cooperative surroundings
- Flexible work schedule (including home office)

For more information see: lea.uni-paderborn.de

Applications from women are particularly welcome and, in case of equal qualifications and experience, will receive preferential treatment according to state law (LGG). Part-time employment is generally possible. Qualified disabled people (in the sense of the German social law SGB IX) are also encouraged to apply.

Applications with the usual documents and the reference number **6087** should be sent to sekretariat@lea.uni-paderborn.de.

Information regarding useage of your personal data can be found here: <https://www.uni-paderborn.de/zv/personal Datenschutz>.

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