

# STUDENT ASSISTANT (M/F/D)

With a focus on human-computer interaction and AI, the competence field **Human-centered Engineering** researches and develops data-based intelligent user interfaces tailored to people's needs and requirements. In a current project, we are investigating the feasibility of decentralized energy trading in power grid and developing the dedicated cloud solution for our customers.

To strengthen the Human-centered Engineering team, we are looking for a/an

Internship / Master Thesis / Working Student: Software Development and Data Analysis for Renewable Energy Trading (m/f/d)

#### Your tasks:

- Develop the algorithm and software that meet the requirement of real-world energy trading.
- Build up cloud infrastructure such as Kubernetes, Helm and Docker for the next generation of decentralized power trading.
- Research and simulation of typical energy usage behavior (profile) of various user group e.g., residential, industry and commercial users.
- Analysis of power grids data (e.g., power generation and consumption of diverse energy devices) using Python and Machine Learning.

## Your profile:

- A registered master student from at least 3<sup>rd</sup> Semester with good grades.
- You study electrical engineering, power engineering, computer science, or physics.
- Basic understanding of energy trading e.g., P2P and Auction-based approaches.
- Good knowledge in programming (e.g., Python)-
- Practical experience with deep learning framework such as PyTorch or Tensorflow is a plus.
- Excellent communication skills in English. Fluent German is a plus.

#### Our offer:

- Suitable for both Internship and master thesis.
- Knowhow in cutting edge ML research and domain expertise.
- An exciting and inspiring open research environment with highly qualified colleagues
- Close collaborations with other leading research groups and industrial technology leaders
- Flexible working conditions

#### About us:

fortiss is the state research institute of the Free State of Bavaria for the development of software-intensive systems, based in Munich. The scientists at the institute work in research, development and

transfer projects with universities, research institutions and technology leaders in Bavaria, Germany, and Europe. They research and develop methods, techniques and tools for reliable, secure, and traceable software solutions and applications of artificial intelligence. Fortiss is organized in the legal form of a non-profit limited liability company. Shareholders are the Free State of Bavaria (majority shareholder) and the Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.

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### Did we catch your interest?

Then we look forward to receiving your complete application with cover letter, CV and references, quoting the following reference number to recruitment.fortiss.org.

Contact: Mr. Zhiwei Han (han@fortiss.org)