Optimization and Web Application Engineer

Student Assistant

8-12 hours/week

Project Description: InnOpTEM

Transmission system planning faces uncertainties due to the rise in supply-dependent plants. Operators use time-phased processes and computer-aided optimization to ensure system security. This research integrates and optimizes switching state changes and redispatch measures through mathematical optimization, heuristics, and artificial intelligence methods. The Chair of Operations Research focuses on developing mathematical solutions for topology optimization in a network operation optimization framework.
This is a joint project with Gurobi, Amprion, the IAEW at RWTH and the FGH, and funded by the Federal Ministry for Economic Affairs and Climate Action.

Job Description

We are currently seeking a proactive and enthusiastic student assistant to support our research project in the areas of mathematical optimization and web application development. As a key member of our team, you will contribute to the implementation and enhancement of optimization algorithms and design and develop a web application for result presentation and analysis.
We offer a well-equipped room with hardware for student assistants, flexible working hours and remote work. Potential tasks are always discussed considering your personal preferences and skills.

Qualifications

- Currently enrolled as a master's student in Computer Science, Mathematics, Business Administration and Engineering: Electrical Power Engineering, or a related field.
- Basic understanding of mathematical optimization concepts and algorithms.
- Proficient in programming languages such as Julia, Python, or similar.
- Familiarity with Git and, preferably, Bash.
- Preferred: Familiarity with web development frameworks (React, Angular, or Vue.js).

How to apply

Interested students are encouraged to submit their transcript of records and a brief motivation explaining their interest in the position to Tim Donkiewicz and Oliver Gaul. The deadline for applications is **29.02.2024**.