

We are looking for a new member for our team with immediate effect.

Student Research Assistant (m/f/d) for Battery Modeling and Characterization.

About us

Join our innovative research project at TUM-EES, where we focus on characterizing the electrical behavior of Lithium Iron Phosphate (LFP) batteries and extracting data parameters from field data during operation. As part of our team, you will contribute to developing and deploying methods for State of Health (SoH) estimation based on model parameter extraction during real-world battery operation.

Tasks

- Conduct laboratory measurements for battery characterization and methodologies validation.
- Perform data analysis for model parameterization.
- Assist in the development of data-driven SoH estimation methods.
- Support the deployment and integration of data-driven battery models in field applications.

Requirements

- Experience and enthusiasm for laboratory work, including test plan design, battery measurement preparation, and instrumentation setup.
- Strong understanding of battery principles and practices.
- Proficient programming skills in MATLAB, Python, and/or Julia.
- Experience with battery modeling based on Equivalent Circuit Models (ECMs).
- Familiarity with machine learning techniques is advantageous.

We offer

- Remuneration according to the tariff regulation
- Flexible working hours up to 20 hours per week.
- Temporary employment contract until 30 June 2025, with an option to extend.
- Collaboration in a committed and young team in a scientific environment.

Application

We look forward to receiving your comprehensive application. Please send it by e-mail to:
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