

At the School II - Computing Science, Business Administration, Economics, and Law - of the Carl von Ossietzky Universität Oldenburg, there will be **as soon as possible** a vacancy in the Department of Computing Science within the research group "Distributed Control in Interconnected Systems" (Prof. Dr.-Ing. Andreas Rauh) for a

Research Assistant (m/f/d)
(salary group 13 TV-L, 100%)

until the end of May 2027. The position is suitable for part-time employment. The opportunity for personal qualification (doctoral studies) will be given.

Essential requirements:

- Master's degree or diploma in a research-oriented university degree program in computer science, electrical/mechanical engineering, mechatronics, mathematics or natural sciences
- Profound mathematical skills with regard to modeling and simulation of dynamic systems
- Profound programming skills in Matlab, C++ or Python
- Excellent knowledge of written and spoken English (level B2 or higher of the Common European Framework of Reference for Languages)
- Interest in the development of simulation, state estimation, and control methods for a sustainable battery production

Initial experience in at least one of the areas of robust control, state estimation, electrochemistry or sensitivity analysis of complex dynamic systems is desirable.

The task is embedded into the international research project "Flexible and Scalable Digital-Twin Platform for Enhanced Production Efficiency and Yield in Battery Cell Production Lines" funded by the European Union as well as the research field of robust control of the research group "Distributed Control in Interconnected Systems". It comprises the following areas:

- Integration of digital twins of selected stages of battery cell production into model-based controllers, e.g. with the aim of energy optimization
- Development of real-time approaches for monitoring of the production process
- Quality control of battery cell production under consideration of uncertainty

- Preparation of project reports in the context of this research project
- Exchange of research results with the academic and industrial partners involved in this project
- Presentation of research results at project meetings and international conferences

The department Distributed Control in Interconnected Systems offers you:

- A pleasant and professionally interesting working environment
- Excellent opportunities for professional/scientific development, including the possibility to perform doctorate degree (PhD) seeking studies
- Active participation in specialized conferences

The University of Oldenburg is dedicated to increasing the percentage of female employees in the field of science. Therefore, female candidates are strongly encouraged to apply. In accordance with Lower Saxony regulations (§ 21 Section 3 NHG) female candidates with equal qualifications will be preferentially considered. Applicants with disabilities will be given preference in case of equal qualification.

Please send your application (in German or English language) as a single PDF file including the usual documents (cover letter, CV, publication list, as well as copies of relevant certificates) **by the 21st of March 2024** addressed to Prof. Dr.-Ing. Andreas Rauh (Andreas.rauh@uol.de).