

The Energy Information Networks & Systems group at the Department of Electrical Engineering and Information Technology at Technical University of Darmstadt seeks to fill the position of a

## Research Associate/Postdoctoral Researcher (all genders) - Computational Methods for Future Energy Systems

The position is initially offered for a two-year period. It is to be filled as soon as possible.

The Energy Information Networks & Systems group explores computational methods for the design and the operation of futureenergy systems with few or no carbon emissions. This will require the widespread integration of variable renewable energies intoenergy systems, via the multimodal energy sector coupling and flexibilization of the demands. The resulting, high degree ofautomation in critical infrastructures additionally mandates in-depth thoughts on cyber resilience.

These challenges are attacked by applying and adapting methods from numerical optimization, distributed control, and machinelearning. We actively work in the following areas:

- Energy system analysis and design, CO2 responsibility, explainability, and uncertainty handling
- Probabilistic forecasting, energy trading, and financial valuation of uncertainty reduction measures
- Resilient control of complex networks, specifically but not limited to power systems

## Main Responsibilities:

The successful applicant is expected to perform competitive research in one of the above mentioned research areas bothindependently and in conjunction with various junior researchers and projects in the field. Depending on the applicant's exactprofile, the affiliation to different university-wide research networks within TU Darmstadt is possible. Stays abroad with theinternational research partners are desired. Contributions to teaching and project management will be defined together with theapplicant during the hiring process.

## Requirements:

- A PhD on a topic related to the research topics mentioned above
- A proven track record of independent researchGood communication skills both oral and in writingInterest in and potential for leadership

The fulfillment of the duties likewise enables the scientific qualifications of the candidate. Opportunity for further qualification (habilitation) is given.

The Technische Universität Darmstadt intends to increase the number of female employees and encourages female candidates to apply. In case of equal qualifications applicants with a degree of disability of at least 50 or equal will be given preference. Wages and salaries are according to the collective agreements on salary scales, which apply to the Technische Universität Darmstadt (TV-TU Darmstadt). Part-time employment is generally possible.

Please send your complete application documents via e-mail with reference to the code number to Professor Dr. rer. nat. FlorianSteinke (office@eins.tu-darmstadt.de).

By submitting your application, you agree that your data may be stored and processed for the purpose of filling the vacancy. You can find our  $\rightarrow$  privacy policy on our webpage.

## **Code No. 480**

Published on August 01, 2023 Application deadline September 12, 2023