technische universität
dortmund

Fakultät für Elektrotechnik
und Informationstechnik

Institut für Energiesysteme,
Energieeffizienz und
Energiewirtschaft

Datum: 12.05.2023

Studentische / Wissenschaftliche Hilfskraft (m/w/d) at ie3

The research project "VideKIS" deals with building Virtual Power Plants (VPP) that provide ancillary services (frequency control) from renewable sources. The project deals with different sets of problems (electricity markets, forecasts, and optimisation) for the VPP pool composition, in addition to analysing decentralised ancillary services (modelling and simulation).

Tasks:

- Subject-related literature research: Virtual power plants, Decentralised power generation plants, energy and balancing markets in Europe
- Developing and working with VPP pool composition techniques which consider different aspects (technical, economical, technology regulations)
- Dealing with weather-dependant energy generation of renewables, handling the uncertainties of generation profiles and energy or balancing markets

Requirements:

- A strong interest and motivation in applying concepts to specific problems, programming languages (e.g. Python) is necessary.
- At least 4th semester in studies (e.g. electrical engineering and information technology, industrial engineering, automation & robotics, computer science)
- Language skills: English
- Previous knowledge in the field of electrical power engineering (advantageous)
- Working hours ~ 10 hours/week

Advantages:

The tasks enable you to learn subject-related skills for your career and at the same time provide you with preliminary knowledge for your further studies. The work can be organised flexibly by arrangement and is therefore easily compatible with studies. Remuneration is in accordance with the usual SHK/WHF conditions at TU Dortmund University.

If you are interested, please send your CV by e-mail or ask for an interview.

Contact person:

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