







Institute for Automation and Applied Informatics (IAI)



Hiwi Job Development of a Python software for processing power grid measurement data

Developing and analysing the challenges of a sustainable energy system are current and central research topics. An important part of this is the analysis of specific measurement data that characterises the properties of electricity grids. Analysing this data helps to understand the challenges of electricity grids with a high proportion of renewable energies and to determine the measures required to ensure the stability of grids.



At IAI, we have been measuring electricity data in various electricity grids around the world for several years. We are using measurement devices that we manufacture inhouse. The data generated by these measurements must be processed, cleaned and converted into a form that can be analysed. We need your help to enable simple, automatable processing and thus make it easier to publish the data for research purposes!

Tasks:

- Creation of a Python repository for an automatable process pipeline
- · Functionality inspired by existing Matlab repository
- · Extension of the existing software with new functionality

Education, experience and skills:

- Specialization: Computer Science, Electrical Engineering, Energy Systems, Mathematics
- Knowledge of Python required, ideally Matlab skills

We are flexible regarding the selection of your weekly working hours.

If you are interested please contact:

- · Ulrich Oberhofer ulrich.oberhofer@kit.edu
- Sebastian Pütz sebastian.puetz@kit.edu

Contact: Ulrich Oberhofer

Data-driven Analysis of Complex Systems (DRACOS)

Phone: 0721 / 608 28965 E-mail: ulrich.oberhofer@kit.edu