Karlsruher Institut für Technologie

15.09.2022

Student Assistants (HiWi Job)

Programming of a Human-Machine-Interface (HMI) with Python

Job Description:

Energy Lab 2.0 is a large testing facility, located on Campus Nord of the KIT. The laboratory enables Power-Hardware-In-the-Loop (PHIL) experiments, that correspond to the testing of high-power energy technologies in realistic grid conditions, connecting the real hardware under test with a real-time simulated grid by means of a power interface. Recently, the laboratory acquired a new DC converter. The power device can be used as a DC-voltage source for the tests of batteries and electrical storage. The final setup should be remotely controlled for security reasons. A Human-Machine-Interface is then required to make the DC converter control easier.

What we offer:

- Insights in day to day research operations, conducting experiments, and publication process
- Hands-on lab experience in the unique and advanced 1MW Energy Lab 2.0 environment
- Flexible working hours and location
- Friendly work environment

Your Tasks:

- Create and design the different windows, text fields, and buttons with Python.
- Link the different text fields and buttons with their corresponding variables in order to build an interactive control panel.
- Link the acquired data from the DC converter with their corresponding text fields.

Your Profile

- Knowledge of programming language Python
- Knowledge of the wxPython module is a plus
- Basics of Raspberry Pi programming is a plus

If you are interested in this position, just contact us or send us your CV with a brief mail describing yourself and your motivation – we are looking forward to your application!

Contact:

Maëva Courcelle

Campus Nord
ITEP: Geb. 410 R.122
Tel.: 0721 608-24084
Mail: maeva.courcelle@kit.edu

Workload: 25-30h per month

Start: From now on

Duration: Contract length is 4 months with the possibility to extend