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:
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Workload: 25-30h per month
Start: From now on
Duration: Contract length is 4 months with the possibility to extend