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Chair for Information Systems Research, Platz der Alten Synagoge, KG II



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Call for Applications: Internship and/or Master's Thesis at Lawrence Berkeley National Laboratory (LBNL) in Berkeley, California

The Chair for Information Systems Research (Prof. Neumann), in cooperation with the Department of Telematics (Prof. Müller) and the Microgrid Group at LBNL (Dr. Stadler), is looking for applications by qualified computer science students for an internship and/or master's thesis project at LBNL. As part of the assignment, the student continues the development of a decision support software for microgrid investments and operations. **The duration of the assignment is at least six months, but can be flexibly extended.**

The successful applicant will develop new web-modules and databases, which expand and use the functionality of internally developed optimization models for Distributed Energy Resources (DER). The applicant will use VBNNet, HTML5, and Java to program user interfaces for stochastic optimization modules based on project-specific constraints. Thus, this work emphasizes accessibility for microgrid users and integration of models with the web-based Graphical User Interface of the Distributed Energy Resource Customer Adoption Model (DER-CAM).

Your profile:

- Working on your Master's degree in Computer Science or a related field
- High proficiency with VBNNet, HTML5, Java, and GUI programming
- Basic understanding of operations research and optimization concepts
- Experience with or willingness to acquaint yourself with GAMS (General Algebraic Modeling Software) or comparable software tools
- Demonstrated ability in data visualization, i.e. you are able to generate graphics that convey complex ideas and data elegantly.
- Willingness to work in Berkeley, California, for the duration of the assignment

— The job:

- Support development of new graphical modules/interfaces for DER-CAM, based on VBNet, HTML, or Java which support the functionality of internally developed MILP DER-CAM models. Support the web-based Graphical User Interface design of DER-CAM and build related databases.
- Support MILP feature development within DER-CAM (new technologies, stochasticity of renewables)
- Work with DER-CAM clients, communities, and microgrid developers to improve the web version of DER-CAM and support them on tool related issues
- Resolve bugs for the users.
- The assignment comes with a monthly stipend of USD 2,500

The earliest starting date is October 1, 2015. The internship can be combined with a Master's thesis and applicants are encouraged to do so.

For further questions, you can contact Tobias Brandt via email: tobias.brandt@is.uni-freiburg.de

Applications (including letter of motivation, CV, and transcript of records) are to be submitted electronically to tobias.brandt@is.uni-freiburg.de by July 27, 2015 23:59.