Interdisciplinary Project
Stand: 08.06.2017

The Fraunhofer Institute for Building Physics is offering a Interdisciplinary Project at its working group Building System Solutions about the following topic:

“Implementation of new Micro-Services on a Web-Based Analysis Platform for the Optimization of Building Operation”

Fraunhofer IBP is a multifaceted research and development institute within the Fraunhofer Society and works in all fields of building physics. The working group of building system solutions works, among other things, on analysis methods for discovering and identifying faults in the operation of building installations and for optimizing these operation procedures.

Within the scope of the work, a concept for the simple integration of developed analysis modules into an existing micro-service-based platform is to be developed.

This includes the following tasks:
- Identify and define the required characteristics, including applications, processes, and data models, based on the general methods of software design.
- Implementation of existing analysis algorithms as micro-services in Java
- Implementation of data processing and related reports with the help of the software ‘WSO2’
- Development of a concept for a simple and flexible extension of the platform by any micro-services from the building data analysis via a web application

Desired personal attributes for the candidate:
- Study of computer science or a related subject
- Comprehensive knowledge of the methods of software design
- Practical experience with at least one framework for Java programming
- Basic Knowledge of Enterprise Integration Patterns (EAI) and Service-Oriented Software Architecture (SOA)
- Basic knowledge of micro-service-based software architecture
- The ability to work independently into a new issue
- A conceptual and analytical approach as well as good communicative skills
Please contact in case of questions related to the topic to:
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