E.ON Energy Research Center | RWTH AACHEN UNIVERSITY

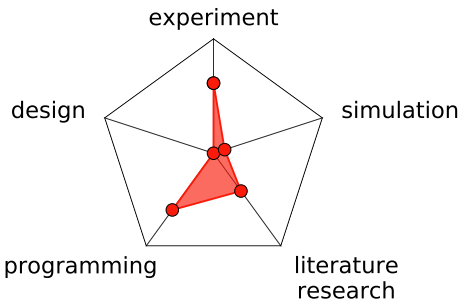
Master Thesis:

Automized commissioning and functioning tests for building automation systems

Vendors often advertize the advantages of building automation systems e.g. they can enhance efficiency and comfort. However, a study revealed that often the claimed efficency is not achieved or even the function not guaranteed, which is mostly by rudimentary commissioning tests or differing operation conditions. Automized commisioning and functioning tests can check the functionality any time and hence validate the implementation of the automation system and provide nessecary procedures in case of discrepancies.

Scope of work:

In this thesis, you will define commissioning and functioning test that allow for a validation of the original planning and checking of the declared functions. Furthermore these tests should enable testing of cause-effect relationships, so faulty components can automatically be detected. You will further implement the defined routines in controller code. Last but not least you will run the routines in a real automation system and discuss the results.



Our profile:

E.ON Energy Research Center at Aachen University is concerned with concepts of sustainable energy supply that account for technical feasibility as well as social and economic aspects. Reduction of primary energy consumption in conjunction with increased indoor air quality is a major focus of research.

Contact:

M. Sc. Markus Schraven
Room 02.04

RWTH Aachen University
E.ON Energy Research Center
Energy Efficient Buildings and Indoor Climate | EBC

Mathieustrasse 10
52074 Aachen
Germany

T +49 241 80-49592
mschraven@eonerc.rwth-aachen.de
www.eonerc.rwth-aachen.de