



The Honda Research Institute Europe (HRI-EU) uses SimulationX for researching smart energy management

The foundation of the Honda Research Institute in Europe alongside sister institutes in Japan and the U.S. back in 2003 was motivated by the idea to further advance innovative solutions for more sustainable technologies.

Focusing on the future of computer science, the HRI-EU conducts research into intelligent systems ranging from accident-free mobility to cognitive robotics and from smart process management to the efficient use of resources.

Challenge

Better energy efficiency of buildings

Climate change and rising energy costs pose a major challenge to society's prosperity. In the wake of changing attitudes towards nuclear power, innovative solutions for generating and storing energy are more than ever in high demand. Designing energy efficient buildings is thus one step towards a more eco-friendly energy balance.

Solution

Green Building Package for smart homes

The package developed in collaboration with the Dresden University of Technology and EA Systems brings all aspects of domestic housing and automotive technology together. With models of heating systems, electric cars, weather data and user profiles, it computes consumption, costs and emissions through detailed simulations.

Benefits

Advanced optimization environments

Based on the Modelica language, models can be easily extended or created from scratch. C-code export and a variety of interfaces already well-established in the automotive industry ensure a seamless integration into existing development environments, e.g. for Evolutionary Optimization.

»SimulationX is an excellent solution to integrate both automotive and building simulations for smart energy management on one single platform.«

Dr. Tobias Rodemann
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