

Dependable Ubiquitous Automation National Centre of Competence in Research

Brief overview

The latest advances in sensor technology, data generation and computing have the potential to profoundly change areas of our economic and daily lives. The complete automation and control of entire systems such as cities (smart cities), power grids (smart grids) or industrial processes (Industry 4.0) is increasingly becoming a reality in the course of digital transformation.

The aim of the Dependable Ubiquitous Automation National Centre of Competence in Research (NCCR) is to advance the methodological and technological bases for the large-scale implementation of such complex systems. By improving decision-making and control procedures and developing new algorithms and computer methods, the reliability and flexibility of intelligent systems can be improved. The new findings will be applied in the fields of energy management, mobility and advanced manufacturing. One of the NCCR's key projects is to develop and implement a fully automated and decentralised energy management system at district or commune level. This will allow the economic potential and social impact of automated applications to be tested in real life.

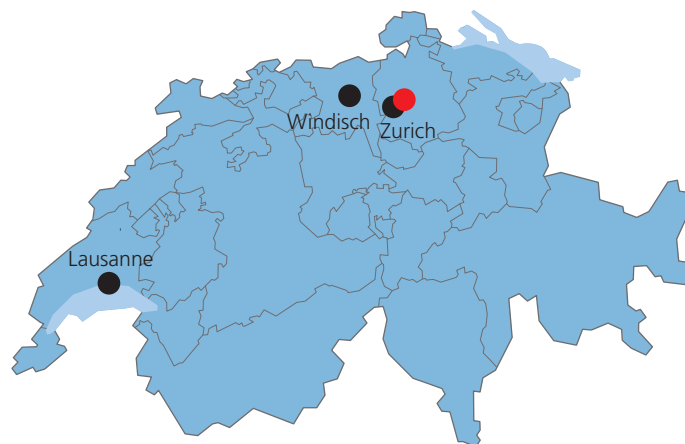
The Dependable Ubiquitous Automation NCCR's home institution is the ETH Zurich (ten research groups). It also comprises four research groups at the EPF Lausanne, one at Swiss Federal Laboratories for Materials Science and Technology (Empa) and one at the University of Applied Sciences and Arts Northwestern Switzerland (FHNW).

Further information

<https://control.ee.ethz.ch>
www.sbf.admin.ch/nccr-e

Facts and figures

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Home institution ●
(number of groups)
ETH Zurich (10)

Network
(number of groups)
EPF Lausanne (4)
Empa (1)
FHNW (1)