

Workshop 11: Smart Systems for Better Living Environments

Ralf Dörner¹, Uwe Brinkschulte², Marcus Thoss² and Adrian Ulges²

Rapid developments in information and communication technology (ICT) continue to change the way we work, communicate, and spend our leisure time. Future living environments will benefit greatly from the development of adaptive algorithms and systems that offer secure and transparent smart services. With communication, we denote the communication between technical systems as well as the communication between information and communication technology (ICT) and residents in private living quarters. To meet the challenges inherent in this research area, various disciplines of computer science are required, ranging from embedded systems, telecommunication, computational theory, cryptography, computer graphics and computer vision to artificial intelligence.

The SENSYBLE workshop 2017 brings together researchers and practitioners from various disciplines of computer science who work in the area of enhancing private living environments with information and communication technologies. It is organized by the SENSYBLE doctoral college, a joint research initiative by the Computer Science and Mathematics department of the Goethe-University / Frankfurt am Main and the department of Design, Computer Science, Media of the RheinMain University of Applied Sciences / Wiesbaden.

- Self-X properties (self-organization, self-configuration, self-optimization, self-healing, self-protection, self-integration)
- Cryptography for authenticity, integrity and anonymity
- Secure embedded systems
- Multi-modal data analytics
- Multisensor and evolutionary user interfaces and embodied interaction
- Visualization and usability aspects of self-organizing systems
- Internet of Things and Middleware for context-sensitive, adaptive services
- Engineering of distributed smart systems
- Software engineering and business aspects of smart system development
- Applications, e.g. intelligent assistive systems for health care

¹ Goethe-Universität Frankfurt am Main

² HS RheinMain Wiesbaden

Organization: Prof. Dr. Ralf Dörner¹, Prof. Dr. Uwe Brinkschulte², Marcus Thoss², Prof. Dr. Adrian Ulges²

Program Committee: Prof. Dr. Uwe Brinkschulte¹, Prof. Dr. Ralf Dörner², Prof. Dr. Martin Gergeleit², Prof. Dr. Bodo Iglar², Prof. Dr. Reinhold Kröger², Prof. Dr. Detlef Krömker¹, Prof. Dr. Kai Rannenberg¹, Prof. Dr. Steffen Reith², Prof. Dr. Ulrich Schwanecke², Dr. Jetzabel Serna¹, Prof. Dr. Ulrike Spierling², Marcus Thoss, M.Sc.², Prof. Dr. Adrian Ulges²