

Socio-Technical Design and Value Orientation

Walid Maalej¹ Alexander Felfernig²

“Software systems are developed by humans for humans”. This motto represents the main driver of this track. On one hand, social and human factors influence Software Engineering activities (and their productivity) as well as software systems (and their quality). Particularly empirical research has aimed during the last decade to understand, leverage, and consider human and social factors when developers, testers, managers, and users interact in software projects. On the other hand, software is pervasive in our lives: it mediates people-to-people communication, supports human choices, and might even have far-reaching impact on lives, economies, and the planet. Software and its development needs to accommodate a wide range of social and human values, such as trust, governance, reputation, privacy, and sustainability – which by itself should be reflected in design, engineering, and deployment processes.

This track brings together the core contributing communities on socio-technical design and value orientation to present and discuss cutting edge research and to further advance the field. We particularly target the communities of Requirements Engineering, Software Engineering, Information Systems, CSCW/Social Computing, and Societal Computing but are also seeking to cross boundaries to related fields.

Topics of interest for this track included: human aspects in software Engineering; socio-technical design; requirements engineering, in particular value-driven RE; theories and applications of social and crowd computing; sustainability, explainability and trust of complex software systems; engineering social systems; software engineering impact on society; value of software systems and processes; ethical and legal aspects in software development; user involvement; feedback and interaction loops: between systems, users, and developers.

The program committee correspondently consisted of experts in the related area (with focus on German speaking experts as the conference does):

- Eva Bittner, University of Hamburg
- Claude Draude, University of Kassel
- Jörg Dörr, Fraunhofer IESE

¹ University of Hamburg, maalej@informatik.uni-hamburg.de

² TU Graz, alexander.felfernig@ist.TUGraz.at

- Schahram Dustdar, TU Wien
- Gregor Engels, University of Paderborn
- Alexander Felfernig, TU Graz (co-chair)
- Martin Glinz, University of Zurich
- Eric Knauss, Chalmers and University of Gothenburg
- Agnes Koschmider, KIT Karlsruhe
- Walid Maleej, University of Hamburg (co-chair)
- Daniel Mendez, TU Munich
- Judith Michael, RWTH Aachen
- Ali Sunyaev, KIT Karlsruhe
- Barbara Paech, University of Heidelberg
- Birgit Penzenstadler, California State University
- Guenther Ruhe, University of Calgary
- Christoph Stanik, HITEC e.V.

The track solicited two kinds of submissions. First, extended abstracts provide a summary of already published outstanding work, which recently appeared in top international venues and which should be presented to the German-speaking community. Second, regular articles present original research with new insights and stable results. In total, we received 5 abstracts published at top venues (ACM Transaction on Social Computing, ACM Conference on Computer Supported Cooperative Work (CSCW), International Conference on Software Engineering (ICSE), and International IEEE Conference on Requirements Engineering (RE)). We accepted all five abstracts for presentations at the conference. For the details, the readers of this proceedings are redirected in the abstracts to the original publications. Moreover, we received 12 full paper submissions. One was incomplete and thus desk-rejected. Each of the remaining 11 submissions had three detailed reviews by different members of the program committee. At the end we accepted 4 full papers based on the reviews and a follow-up discussion.

We hope that this track – including the presentations of accepted papers, the invited talks, and the informal interactions and discussions – will contribute to building a “new” community around this central, emerging, multi-disciplinary topic and that we will see follow up projects and venues in future.