Value-Sensitive Design of Internet-Based Services: Towards an Integration of Technology and Values

Hannes Hartenstein, Alexander Maedche and Martina Zitterbart

Dear readers,

This is the first time the workshop on „Value-Sensitive Design of Internet-Based Services: Towards an Integration of Technology and Values” takes place as part of the German “INFORMATIK 2016” conference in Klagenfurt on September 29th 2016. The workshop brings together researchers that deal with questions of value-sensitive design and delivery of Internet-based services from different disciplinary and interdisciplinary perspectives.

Internet-based services are increasingly important for our society. We consume them on a daily basis for many different purposes, comprising chat applications, social networks, shopping and the like. With the Internet of Things and advanced applications such as smart cities and smart home we are expecting huge potentials for a more sustainable society at large, covering the economical, ecological and the social dimension. However, the provisioning of Internet-based services comes with conflicting interests between the different stakeholder groups of providers, consumers and governance actors. A prominent example of such a conflict is using consumer data as the “currency” for the consumption of Internet-based services, e.g. delivered via mobile Apps. Resulting conflicts between consumers and providers occur on a continuous basis, as personal data is delivered to the provider and, thus, compromises the privacy of the consumer. However, mostly the consumer is left without any choice and, in this sense self-determination of the individual consumer is limited. Governance actors, again, have a different view which is heavily motivated through societal values, such as human rights and constitutional law or regulations and policy instruments. They can also help finding a balance in the case of interest conflicts between providers and consumers.

At the one-day workshop two invited talks and five papers are presented: Karsten Weber and Peter Reichel provide in their invited talks two different perspectives on value-sensitive design and delivery in the context of information and communication technologies: Karsten Weber focuses on the question why ethics for building good computers is important. Peter Reichel discusses the “Internet of People (IoP)” and specifically perspectives of an anti-copernican revolution in networking research. Marcus Ast and Martin Gaedke deal in their paper about values apply in hyper-

1 KIT Karlsruhe, hannes.hartenstein@kit.edu
2 KIT Karlsruhe, alexander.maedche@kit.edu
3 KIT Karlsruhe, zitterbart@kit.edu
connected societies and present a concept for integrating functional and non-functional values into technology platforms. Teemu Kärkkäinen and Jörg Ott propose in their work a Libero router network, which decentralizes both the communication infrastructure and services. Neudecker et al. specifically look at access control systems and propose and compare design alternatives for value-sensitive design. Burger et al. present their paper titled “Popping the bubble: principles of information neutrality and counter measures against biased information”. In their work, they investigate information processing mechanisms and their influence on net neutrality as well as suggest counter measures against biased information. Complementing the provider and technology-oriented perspectives, Dorner et al. present an experimental design of a value-oriented decision support system for selecting Internet-based services. Complementing the invited talks and the five paper presentations, a brainstorming session following the “Zukunftswerkstatt” concept is done as part of the workshop. The underlying idea of this session is to jointly develop new ideas or solutions for fundamental problems of designing and delivering value-sensitive Internet-based services.

We hope that the workshop is establishing a good starting point and a community for further extending research in the exciting field of value-sensitive design and delivery of Internet-based services. At this point we would like to thank all participants for their contributions to make this workshop a success: the authors, the program committee and the event organizers.

Thank you!

Hannes Hartenstein, Alexander Maedche and Martina Zitterbart