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IFIP is the global non-profit federation of societies of ICT professionals that aims at achieving a worldwide professional and socially responsible development and application of information and communication technologies.

IFIP is a non-profit-making organization, run almost solely by 2500 volunteers. It operates through a number of technical committees and working groups, which organize events and publications. IFIP's events range from large international open conferences to working conferences and local seminars.

The flagship event is the IFIP World Computer Congress, at which both invited and contributed papers are presented. Contributed papers are rigorously refereed and the rejection rate is high.

As with the Congress, participation in the open conferences is open to all and papers may be invited or submitted. Again, submitted papers are stringently refereed.

The working conferences are structured differently. They are usually run by a working group and attendance is generally smaller and occasionally by invitation only. Their purpose is to create an atmosphere conducive to innovation and development. Refereeing is also rigorous and papers are subjected to extensive group discussion.

Publications arising from IFIP events vary. The papers presented at the IFIP World Computer Congress and at open conferences are published as conference proceedings, while the results of the working conferences are often published as collections of selected and edited papers.

IFIP distinguishes three types of institutional membership: Country Representative Members, Members at Large, and Associate Members. The type of organization that can apply for membership is a wide variety and includes national or international societies of individual computer scientists/ICT professionals, associations or federations of such societies, government institutions/government related organizations, national or international research institutes or consortia, universities, academies of sciences, companies, national or international associations or federations of companies.

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Anja Lehmann · Diane Whitehouse
Simone Fischer-Hübner · Lothar Fritsch
Charles Raab (Eds.)

Privacy and Identity Management

Facing up to Next Steps

11th IFIP WG 9.2, 9.5, 9.6/11.7, 11.4, 11.6/SIG 9.2.2
International Summer School
Karlstad, Sweden, August 21–26, 2016
Revised Selected Papers

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Preface

The year 2016 saw a raft of advances in data protection regulation. Globally there were many questions raised about how to introduce and adopt data protection and data privacy legislation appropriately.

In Europe, the General Data Protection Regulation (GDPR) poses challenges to organizations and businesses that provide services based on personal data. Adopted in April 2016, the regulation will come into force in May 2018. While it retains the main principles embedded in the former Data Protection Directive 95/46/EC, it introduces new measures and strengthens others. Major changes in areas to be regulated include data subjects' rights to be forgotten and data portability, the requirement for data controllers to enable privacy by design and default, and the introduction of potentially serious fines for non-compliance with the law for global players. These elements have the potential to improve privacy and data protection, but they also pose a number of difficulties regarding scope, feasibility, and implementation. Other forms of legislation also changed the regulatory scene, with their effects on privacy and identity. The 2015 Cyber Security Directive and the "Privacy Shield," which replaces the Safe Harbour Agreement, also raise new questions.

Yet legislation is not the only driver of change in the fields of privacy and identity. Technological advances such as the use of open data, big data, and sensor development in the Internet of Things are rapidly changing who holds what data, where and how that data may be used, and the transparency of data processing. Business development is increasing in fields related to surveillance, control of mass movement, security, safety, and identity management. Cities, towns, communities, streets, house, and modes of transportation are all becoming smarter. Fields of organizational activity are merging. There are many dilemmas for communities and societies: in achieving better and safer infrastructures so that people can communicate freely without being observed either by commercial or by governmental bodies (user empowerment); in improving the relationship between individuals and institutions (especially concerning the privacy protection goals of transparency and participation); and in setting up democratic processes for effective oversight over the consequences of new technologies.

These questions, as well as many others stemming from current research on privacy and identity management in general were addressed at the 11th Annual International Federation for Information Processing (IFIP) Summer School on Privacy and Identity Management, which took place in Karlstad, Sweden, during August 21–26, 2016.

This school was the 11th in a series that continues to take a holistic approach to society and technology and support interdisciplinary exchange through keynote and plenary lectures, tutorials, workshops, and research paper presentations. Participants' contributions combined interdisciplinary approaches to bring together a host of perspectives: technical, legal, regulatory, socioeconomic, social, societal, political, ethical, anthropological, philosophical, and psychological.

The 2016 summer school was a joint effort between IFIP Working Groups 9.2, 9.5, 9.6/11.7, 11.4, 11.6, Special Interest Group 9.2.2, and several European and national projects: The EU H2020 CREDENTIAL project, the German Privacy Forum (Forum Privatheit) project, and the EU H2020 Marie Curie Innovative Training Network, Privacy&Us. Moreover, it was supported by the research center, HumanIT, at Karlstad University.

The 2016 school's keynote introduction was delivered by Roger Clarke. Invited lectures were given by Amelia Andersdotter together with Anders Jensen-Urstad, Jan Camenisch, Jolanda Girzl, Marit Hansen, Rainer Knyrim, Steven Murdoch, Charles Raab, Bernd Stahl, Angela Sasse, and Vicenc Torra. A tutorial on the state of academic research in Tor was presented by Linus Nordberg. Several other workshops were organized. In particular, reflecting the school's theme, a lively panel debate was held between Roger Clarke and Sarah Spiekermann on the ethical responsibilities of the information systems discipline when working on privacy and personal data markets. The school ended with a panel moderated by Harald Zwingelberg on future directions.

This summer school brought together more than 90 junior and senior researchers and practitioners from Europe, North and Latin America, Australia and Asia, including many young entrants to the field, who came from many disciplines. They came to share their ideas, build up a collegial relationship with others, gain experience in making presentations, and have the opportunity to publish a paper through these proceedings. Sessions were held on a wide range of topics: clearly on privacy and identity management, as the school's name suggests, but also more specifically on the GDPR and data protection in general, the law, privacy frameworks, taxonomies, transparency, and user rights. Other elements of the program focused on research methods, research ethics, privacy technology progress, privacy of personal health data, cloud privacy, and cyber security issues.

One of the school's goals is to encourage the publication of thorough research papers by students and young researchers. To this end, the school had a three-phase review process for submitted papers. In the first phase, authors were invited to submit short abstracts of their work. Abstracts in the scope of the call were selected for presentation at the school, and the authors were then encouraged to submit the full papers of their work. All papers appeared in the unreviewed online pre-proceedings on the school's website. After the school, the authors received two or three reviews from the Program Committee members, and were given time to revise and resubmit their papers for inclusion in these proceedings. In total, we received 36 short paper submissions, from which finally 20 research papers evolved and were submitted to the last review round. Out of these submissions, nine papers were accepted, including the paper by Claudia Quelle, which was judged to be the best single-authored student paper during the school.

We are particularly grateful therefore to the Program Committee, the many reviewers of abstracts and papers, and those who advised the authors on their revisions. We also acknowledge help and support at different stages of the school's preparation by Ronald Leenes and Sarah Spiekermann. Our thanks, too, to Karlstad University, and especially its Privacy and Security Group (PriSec) at the Computer Science Department and the Conference Department for their support of the school's activities.

Reflecting the school's theme of "Privacy and Identity Management – Facing up to Next Steps", it is clear that 2017 brings international challenges to many different stakeholders, not only in terms of privacy and identity management. We hope for, and are committed to, continued advocacy for the effective realization of citizens' and organizations' rights in these two highly crucial fields.

February 2017

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Diane Whitehouse
Simone Fischer-Hübner
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IFIP Summer School 2016

11th International Summer School on Privacy and Identity Management

Facing up to Next Steps

August 21–26, 2016, Karlstad, Sweden

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