12th Workshop on Privacy in the Electronic Society (WPES 2013)

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ABSTRACT

The evolution of the Information and Communication Technology (ICT) has radically changed our lives, making information available from anywhere at any time through different kinds of devices. The advantage of the growing availability of computational power and connectivity resources at low prices is the easiness of collecting, sharing, processing, and accessing information. This advantage however does not come for free as it introduces unprecedented privacy risks. The attention toward these problems is growing every day and the need for privacy-aware policies, regulations, and techniques has been widely recognized. WPES is a yearly forum, this year at its 12th edition, that brings together researchers and practitioners interested in discussing the privacy issues characterizing our global and interconnected society.

Categories and Subject Descriptors

K.4.1 [Computers and Society]: Public Policy Issues — Privacy; K.6 [Management of Computing and Information Systems]: Security and Protection; K.6.m [Management of Computing and Information Systems]: Miscellaneous— Security

Keywords

Privacy; electronic society; workshop

1. INTRODUCTION

The recent advancements of digital infrastructures have revolutionized the way in which data are collected, stored, managed, processed, shared, and distributed. Nowadays, thanks to a wide network connectivity, we can rely on external servers for storing our pictures and videos, use the computational power offered at low prices by cloud providers, access remotely stored data made available by third parties. These are only a few examples of the advantages of living

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anonymity, pseudonymity, and unlinkability
crowdsourcing for privacy and security
data correlation and leakage attacks

- data security and privacy
- electronic communication privacy
- economics of privacy
- information dissemination control

in a globally interconnected society, where everything we are looking for is at the distance of 'a mouse click'. The price we pay for these benefits is a higher privacy risk, due to the increased amount of sensitive information collected, stored, and distributed, and to the lack of control of the users on their own data. It is interesting to note that the problem of protecting privacy is continuously changing as technology evolves, presenting new opportunities for users but also introducing (as downside) new vulnerabilities. Privacy problems are receiving more and more the attention of researchers and regulators, as well as of private users and public organizations.

WPES aims to bring together researchers and practitioners who are interested in discussing on privacy issues arising in the electronic society. Privacy problems concern many different areas (e.g., data management, social networks, cloud systems, wireless networks, mobile devices). This yearly forum represents an occasion for participants to present and share their theoretical as well as experimental results, to learn about new solutions for known privacy problems, and also to discuss open issues that still need to be addressed. The workshop is this year at its 12th edition. Like for past editions, WPES is held in conjunction with the ACM CCS conference – the flagship annual conference of the Special Interest Group on Security, Audit and Control (SIGSAC) of the Association for Computing Machinery (ACM). This colocation has advantages for both the events as the workshop enriches the conference program and, at the same time, benefits from the presence of a wide community of researchers, practitioners, developers, and users interested in information security topics.

The workshop solicited submissions from academia and industry presenting novel research on all theoretical and practical aspects of electronic privacy, as well as experimental studies. It also encouraged submissions from other communities such as law and business that present these communities' perspectives on technological issues. Topics of interest for paper submission included, but were not limited to:

- models, languages, and techniques for big data protection
- personally identifiable information
- privacy-aware access control
- privacy and anonymity on the Web
- privacy in cloud and grid systems
- privacy and confidentiality management
- privacy and data mining
- privacy in the digital business
- privacy in the electronic records
- · privacy enhancing technologies
- privacy in health care and public administration
- privacy and human rights
- privacy metrics
- privacy in mobile systems
- privacy in outsourced scenarios
- privacy policies
- privacy vs. security
- privacy in social networks
- privacy threats
- privacy and virtual identity
- public records and personal privacy
- user profiling
- wireless privacy

2. WORKSHOP CONTRIBUTIONS

This year, the workshop received a record number of submissions, 103, from 27 different countries. Among these papers, the program committee accepted 20 full papers and 10 short papers. The topics of the papers in the workshop program cover a wide variety of scenarios, such as privacy in social networks, privacy of genomic data, privacy in mobile scenarios, privacy of location data.

3. WORKSHOP COMMITTEES

The program chair of the workshop is Sara Foresti, Università degli Studi di Milano, Italy. The program committee is composed of the following experts in the topics of interest for the workshop.

- Rafael Accorsi, University of Freiburg, Germany
- Kevin Bauer, MIT, USA
- Marina Blanton, University of Notre Dame, USA
- Carlo Blundo, Università degli Studi di Salerno, Italy
- Graham Cormode, University of Warwick, UK
- Marco Cova, University of Birmingham, UK
- Anupam Datta, Carnegie Mellon University, USA
- Sabrina De Capitani di Vimercati, Università degli Studi di Milano, Italy
- Roberto Di Pietro, Roma Tre University of Rome, Italy
- Keith Frikken, Miami University, USA

- Joaquin Garcia-Alfaro, Telecom SudParis, France
- Tyrone Grandison, Proficiency Labs, USA
- Dimitris Gritzalis, AUEB, Greece
- Sushil Jajodia, George Mason University, USA
- Rob Jansen, U.S. Naval Research Laboratory, USA
- Murat Kantarcioglu, University of Texas at Dallas, USA
- Apu Kapadia, Indiana University Bloomington, USA
- Florian Kerschbaum, SAP, Germany
- Markulf Kohlweiss, Microsoft Research, UK
- Adam J. Lee, University of Pittsburgh, USA
- Giovanni Livraga, Università degli Studi di Milano, Italy
- Javier Lopez, University of Malaga, Spain
- Ashwin Machanavajjha, Duke University, USA
- Stefano Paraboschi, Università degli Studi di Bergamo, Italy
- Kui Ren, University at Buffalo, USA
- Pierangela Samarati, Università degli Studi di Milano, Italy
- Abhinav Srivastava, AT&T Labs Research, USA
- Paul Syverson, Naval Research Laboratory, USA
- Marianthi Theoharidou, AUEB, Greece
- Carmela Troncoso, Gradiant, Spain
- Cong Wang, City University of Hong Kong, Hong Kong
- Meng Yu, Virginia Commonwealth University, USA
- Ting Yu, North Carolina State University, USA
- Zhenjie Zhang, ADSC, USA
- Jianying Zhou, I2R, Singapore

WPES steering committee is chaired by Pierangela Samarati, from the Università degli Studi di Milano, Italy, and is composed of the following four members.

- Sabrina De Capitani di Vimercati, Università degli Studi di Milano, Italy
- Sushil Jajodia, George Mason University, USA
- Pierangela Samarati, Università degli Studi di Milano, Italy
- Paul Syverson, Naval Research Laboratory, USA

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