16th Workshop on Privacy in the Electronic Society (WPES 2017)

Adam J. Lee University of Pittsburgh Pittsburgh, Pennsylvania adamlee@cs.pitt.edu

ABSTRACT

The 16th Workshop on Privacy in the Electronic Society was held on October 30, 2017 in conjunction with the 24th ACM Conference on Computer and Communications Security (CCS 2017) in Dallas, Texas, USA. The goal of WPES is to bring together a diverse group of privacy researchers and practitioners to discuss privacy problems that arise in global, interconnected societies, and potential solutions to them. The program for the workshop contains 14 full papers and 5 short papers selected from a total of 56 submissions. Specific topics covered in the program include but are not limited to: deanonymization, fingerprinting and profiling, location privacy, and private memory systems.

CCS CONCEPTS

· Security and privacy;

KEYWORDS

Privacy protection

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1 INTRODUCTION

The increased power and interconnectivity of computer systems available today create the ability to store and process large amounts of data, resulting in networked information accessible from anywhere at any time. It is becoming easier to collect, exchange, access, process, and link information. This global scenario has inevitably resulted in an increasing degree of awareness with respect to privacy. Privacy issues have been the subject of public debates, and the need for privacy-aware policies, regulations, and techniques has been widely recognized.

The goal of this workshop is to discuss the problems of privacy in global interconnected societies, as well as possible solutions to these types of problems. The workshop seeks submissions from academia and industry presenting novel research on all theoretical and practical aspects of electronic privacy, as well as experimental studies of fielded systems. We encourage submissions from other

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communities such as law and business that present these communities' perspectives on technological issues. Topics of interest include, but are not limited to:

- anonymization and transparency
- · crowdsourcing for privacy and security
- · data correlation and leakage attacks
- data security and privacy
- data and computations integrity in emerging scenarios
- electronic communication privacy
- economics of privacy
- information dissemination control
- models, languages, and techniques for big data protection
- personally identifiable information
- privacy-access control
- privacy and anonymity on the web
- privacy in biometric systems
- privacy in cloud and grid systems
- privacy and confidentiality management
- · privacy and data mining
- privacy in the Internet of Things
- privacy in the digital business
- privacy in the electronic records
- · privacy enhancing technologies
- privacy and human rights
- privacy in health care and public administration
- privacy metrics
- privacy in mobile systems
- privacy in outsourced scenarios
- · privacy policies
- privacy vs. security
- privacy of provenance data
- privacy in social networks
- privacy threats
- privacy and virtual identity
- user profiling
- wireless privacy

2 PROGRAM

The program for the workshop contains 14 full papers and 5 short papers selected from a total of 56 submissions. Specific topics covered in the program include but are not limited to: de-anonymization, fingerprinting and profiling, location privacy, and private memory systems. The selection of these papers was made by a program committee consisting of 37 researchers whose backgrounds include a diverse array of topics related to privacy:

- Adam J. Lee (Chair), University of Pittsburgh, USA
- Mahdi Nasrullah Al-Ameen, Clemson University, USA
- Vijay Atluri, Rutgers University, USA

- Carlo Blundo, Università degli Studi di Salerno, Italy
- Nikita Borisov, University of Illinois at Urbana-Champaign, USA
- Sherman S. M. Chow, Chinese University of Hong Kong
- Omar Chowdhury, University of Iowa, USA
- Daniel Cullina, Princeton University, USA
- Sabrina De Captitani di Vimercati, Università degli Studi di Milano, Italy
- Josep Domingo-Ferrer, Universitat Rovira i Virgili, Spain
- Sara Foresti, Università degli Studi di Milano, Italy
- Roberto Hoyle, Oberlin College
- Sushil Jajodia, George Mason University, USA
- Limin Jia, Carnegie Mellon University, USA
- Aaron Johnson, NRL, USA
- Apu Kapadia, Indiana University at Bloomington, USA
- Aniket Kate, Purdue University, USA
- Florian Kerschbaum, University of Waterloo, Canada
- Changchang Liu, Princeton University, USA
- Giovanni Livraga, Università degli Studi di Milano, Italy
- Catherine Meadows, NRL, USA
- Pradeep Kumar Murukannaiah, Rochester Institute of Technology, USA
- Mohamed Nabeel, Qatar Computing Research Institute, Qatar
- Samir Patil, Indiana University at Bloomington, USA
- Gerardo Pelosi, Politecnico di Milano, Italy
- Indrakshi Ray, Colorado State University, USA
- Pierangela Samarati, Università degli Studi di Milano, Italy
- Nitesh Saxena, University of Alabama at Birmingham, USA
- Paul Syverson, NRL, USA
- Vicenc Torra, U. Skovd, Sweden
- Blase Ur, University of Chicago, USA
- Kami Vaniea, University of Edinburgh, UK
- Eugene Vasserman, Kansas State University, USA

- Meng Yu, University of Texas at San Antonio, USA
- Ting Yu, Qatar Computing Research Institute, Qatar
- Moti Yung, Snapchat and Columbia University, USA
- Nan Zhang, The George Washington University, USA

3 ORGANIZERS

WPES 2017 was organized by the following individuals:

- General chair: Bhavani Thuraisingham, The University of Texas at Dallas
- Workshop chairs:
 - Taesoo Kim, Georgia Tech
 - Cliff Wang, Army Research Office
- Program chair: Adam J. Lee, University of Pittsburgh
- Publicity chair: William C. Garrison III, University of Pittsburgh
- Steering committee:
 - Sabrina De Capitani di Vimercati, Università degli Studi di Milano
 - Sushil Jajodia, George Mason University
 - Pierangela Samarati (Chair), Università degli Studi di Milano
 - Paul Syverson, Naval Research Laboratory

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