

BigSecurity 2016

An International Workshop with IEEE INFOCOM 2016

April 10-15, 2016
San Francisco, USA

Call for Papers

The Fourth International Workshop on Security and Privacy in Big Data

(BigSecurity 2016, in conjunction with IEEE INFOCOM 2016)

<http://www.nsp.org.au/confs/bigsecurity2016/>

Scope and Topics of Interest

As we are deep into the Information Age, we also witness the explosive growth of data available on the Internet. For example, human beings create about 2.5 quintillion bytes of data every day in 2012, which come from sensors, individual archives, social networks, Internet of Things, enterprise and Internet in all scales and formats. We face one of the most challenging issues, i.e., how to effectively manage such a large amount of data and identify new ways to analyze large amounts of data and unlock information. The issue is also known as Big Data, which has been emerging as a hot topic in Information and Communication Technologies (ICT) research.

Security and privacy issue is critical for Big Data. Many works have been carried out focusing on business, application and information processing level from big data, such as data mining and analysis. However, security and privacy issues in Big Data are seldom mentioned to date. Due to its extraordinary scale, security and privacy in Big Data faces many challenges, such as efficient encryption and decryption algorithms, encrypted information retrieval, attribute based encryption, attacks on availability, reliability and integrity of Big Data.

The purpose of this workshop is to offer a timely venue for researchers and industry partners to present and discuss their latest results in security and privacy related work of Big Data.

The topics of interest include, **but are not limited to:**

- Threat and Vulnerability Analysis in Big Data
- Architecture for Security and Privacy in Big Data
- Encrypted Information Retrieval in Big Data
- Cryptanalysis and Applications in Big Data
- Lightweight Cryptographic Algorithms in Big Data
- Trust in Big Data
- Network Security, Privacy in Big Data
- Network Forensics in Big Data
- Anonymous Communication in Big Data
- Physical Layer Security in Big Data

- Privacy and Security in Cloud Data
- Privacy and Security in Data Center Networks
- Application Level Security and Privacy in Big Data
- Attacks and Counter Measures in Big Data
- Information Forensics in Big Data
- Secure Cross-layer Design in Big Data
- Identity Management and Key Management in Big Data
- Intrusion Detection and Response in Big Data
- Security and Privacy in Complex Networks
- Malware and Virus Detection in Big Data
- Biometric Security and Forensics in Big Data
- Reliability and Availability in Big Data
- Network Security in Big Data
- Network Privacy in Big Data
- Security and Privacy Theories in Big Data
- Security, Privacy, and Trust in Cloud
- Security, Privacy, and Trust in Large Scale Systems

General Co-chairs

Professor Prasant Mohapatra, University of California, Davis, USA.

Professor Jian Pei, Simon Fraser University, Canada

Technical Program Co-chairs

Dr Shui Yu, Deakin University, Australia

Professor Ke Liu, National Natural Science Foundation of China, China

Submission Instruction

Submission Instructions are available from the IEEE INFOCOM 2016 website, and the submission for this workshop can be found at the workshop website.

High quality papers from this workshop will be invited to extend and submit to the special section on Theoretical Foundations for Big Data Applications of IEEE Access and special issue on Cloud Security of IEEE Cloud Computing.

Important Dates

Submission Deadline: December 15, 2015

Authors Notification: February 1, 2016

Final Manuscript Due: February 20, 2016

Enquiries should be submitted to Dr Shui Yu (syu AT deakin.edu.au)