

Call for papers for Communications and Information Systems Security Symposium (CISS)

Symposium Track Co-Chairs

Peter Mueller IBM Zurich Research, Switzerland Cong Wang University of Hong Kong, China

Submissions must be done through EDAS at: https://edas.info/newPaper.php?c=22632&track=81046
The paper submission deadline is October 14, 2016.

Scope and Motivation

The Communications and Information Systems Security Symposium (CISS) will focus on all aspects of security, privacy, trust, and risk management, which poses serious challenges to today's globally connected communities. The symposium welcomes novel contributions on evaluation, modeling, analysis, and design of communication and information systems security solutions, from the physical layer to the application layer. In addition, this year's CISS puts a strong emphasis on network oriented security and privacy, such as security related topics of cloud computing, networking related security in Big Data, IoT, and so on.

Main Topics of Interest

To ensure complete coverage of the advances in communication and information systems security, the topics of interest of the CISS include, but are not limited to, the following areas:

- Anonymity, anonymous communication, metrics and their performance analysis
- Authentication protocols and message authentication
- Authorization and access control
- Availability and survivability of secure services and systems
- Big data security and privacy
- Biometric security
- Botnet detection, prevention, and defense
- Cloud and distributed application security
- Computer and network forensics
- Cryptography and evaluation
- Data center security
- Firewall technologies; intrusion detection, localization, and avoidance
- Formal trust models, security modeling and protocol design
- Key distribution and management
- Lightweight security for IoT
- Location-based services and their security and privacy aspects
- Mobile and wireless network security
- Mobile app security and privacy
- Multi-mode surveillance and homeland security
- Network public opinion analysis and monitoring
- Network security metrics and their performance evaluation
- Network function virtualization security
- Operating systems and application security and analysis tools
- Online social networks and their security aspects
- Physical security and hardware/software security
- Privacy enhancing technologies
- Quantum cryptography and communication applications
- Resource allocation, incentives, and game-theoretic approaches

- · Security for 5-G
- Security in virtual machine environments
- Security in wired systems and optical networks
- Security issues on network middleboxes
- Security of cyber-physical systems
- Security on emerging Internet architectures
- Security risk management
- Software-defined network security
- Trust models, management and certificate handling
- Virtual private networks and group security
- Vulnerability, exploitation tools and virus analysis
- Web, e-commerce, and m-commerce security

Biographies

Peter Mueller joined IBM Research as a Research Staff Member in 1988. He is a co-founder and former Chair of the IEEE Communications and Information Systems Security Technical Committee (CIS-TC). His research expertise covers broad areas of human-machine interfaces, distributed computing systems architecture, communications and interconnects technology, device physics, nanoscience, and computer modeling. Focusing on communications, his main experience is in the fields of complex systems architecture, including resource allocation and re-allocation, synchronization, and real-time behavior; cross layer reliability issues; channel coding techniques; and error control and correction methods. His current field of research is in the area of quantum technologies. He is member of the Electrochemical Society (ECS), the Swiss Physical Society (SPS), and IEEE. He also served as government counsel and as program chair for many international conferences and workshops, such as ICNC 2013, CIS symposium of Gobecom 2012 and ICC 2014.

Cong Wang has been an Assistant Professor at the Department of Computer Science, City University of Hong Kong, since Fall 2012. Before that he has obtained BE and ME from Wuhan University, China, and PhD from Illinois Institute of Technology, USA, all in Electrical and Computer Engineering. His research interests are in the areas of cloud and network security, computer and mobile social networks, as well as secure and practical systems. He has published more than 40 peer-reviewed journal and conference papers, including those at IEEE JSAC, TC, TIFS, TMC, TPDS, IEEE INFOCOM, ICDCS, ACM Multimedia, ASIACCS, ESORICS, and 2 conference best paper awards. His research has been supported by multiple funding agencies, including National Natural Science Foundation of China, Research Grants Council of Hong Kong, Microsoft Azure, and Amazon. He has served as program co-chair for IWCMC 2014 (Security, Trust and Privacy Symposium), and IEEE CCNC 2016 (Cloud track), and as program committees for many International conferences on security, privacy, network, cloud, etc. He is a member of IEEE and ACM.