# 1. Title: COMMUNICATION AND INFORMATION SECURITY SYMPOSIUM (CIS Symposium)

#### 2. Symposium Co-Chairs:

Yi Qian, University of Nebraska - Lincoln, USA. Email: yqian@ieee.org
Xinwen Fu, University of Massachusetts Lowell, USA. Email: xinwenfu@cs.uml.edu
Kui (Quinn) Ren, Illinois Institute of Technology, USA. Email: kui.ren@iit.edu
Dijiang Huang, Arizona State University, USA. Email: dijiang@asu.edu

## 3. Sponsoring Technical Committees:

ComSoc Communications and Information Security Technical Committee (CISTC)

## 4. Symposium scope and motivation

With the advent of pervasive computer applications and due to the proliferation of heterogeneous wired and wireless computer and communication networks, security, privacy and trust issues have become paramount. This Symposium will address all aspects of the modeling, design, implementation, deployment, and management of security algorithms, protocols, architectures, and systems. Furthermore, contributions devoted to the evaluation, optimization, or enhancement of security and privacy mechanisms for current technologies, as well as devising efficient security and privacy solutions for emerging areas from physical layer technology to the application layer, are solicited. A submitted paper should present high-quality and previously unpublished work, and should not be submitted to other conferences or journals in the same time.

#### 5. Topics of Interest

Authentication protocols and message authentication

Biometric security: technologies, risks, vulnerabilities, bio-cryptography, mobile template protection

Cloud computing security

Computer and network forensics

Cryptanalysis

DDOS attacks, DNS spoofing, intrusion, localization and countermeasures

Digital right management: information hiding, watermarking, fingerprinting, and traitor tracing scheme

Formal trust models, security modeling and protocol design

Information systems security and security management

Mobile and Wireless network security, including ad hoc networks, P2P networks, 3G, 4G, sensor

networks, Bluetooth, 802.11 family and WiMAX

Network security metrics and performance

Operating systems and application security and analysis tools

Optical network security

Physical security and hardware/software security

Privacy and privacy enhancing technologies

Public-key, symmetric-key, applied crypto, coding-based cryptography,

Quantum cryptography **Smart Grid Security** Virtual private networks VoIP, IPTV, DAB, and other multimedia security Vulnerability, exploitation tools and virus analysis Web, eBusiness, eCommerce, eGovernment security

## 6. Technical Program Committee

Sudhir Aggarwal, Florida State University, USA Ala Al-Fugaha, Western Michigan University, USA Dhiman Barman, Juniper Networks, USA Raheem Beyah, Georgia State University, USA Fernando Boavida, University of Coimbra, Portugal Giovanni Bodini, University of Rome "Tor Vergata", Italy Rajendra Boppana, University of Texas at San Antonio, USA Ioannis Broustis, University of California, Riverside, USA Hasan Cam, Arizona State University, USA Jiannong Cao, Hong Kong Polytechnic University, China Yu Chen, State University of New York - Binghamton, USA Songqing Chen, George Mason University, USA Yu Cheng, Illinois Institute of Technology, USA Xiuzhen Cheng, George Washington University, USA Changho Choi, Cisco Systems, Inc., USA Jing Deng, University of North Carolina at Greensboro, USA

Liping Ding, Chinese Academy of Sciences, China

Xiaojiang Du, Temple University, USA

Zhenhai Duan, Florida State University, USA

Arjan Durresi, Indiana University Purdue University Indianapolis, USA

Mario Freire, University of Beira Interior, Portugal

Shengli Fu, University of North Texas, USA

Guang Gong, University of Waterloo, Canada

Manimaran Govindarasu, Iowa State University, USA

Guofei Gu, Texas A&M University, USA

Qijun Gu, Texas State University-San Marcos, USA

Yong Guan, Iowa State University, USA

Zhu Han, University of Houston, USA

Pin-Han Ho, University of Waterloo, Canada

Jiankun Hu, RMIT University, Australia

Fei Hu, University of Alabama, USA

Rose Qingyang Hu, Utah State University, USA

Chin-Tser Huang, University of South Carolina, USA

Nen-Fu Huang, National Tsing Hua University, Taiwan

Di Jin, General Motors, USA

Yoshito Kanamori, University of Alaska at Anchorage, USA

Loukas Lazos, University of Arizona, USA

Jie Li, University of Tsukuba, Japan

Tongtong Li, Michigan State University, USA

Wei Li, Victoria University, New Zealand

Xiaodong Lin, University of Ontario Institute of Technology, Canada

Zhijun Liu, Cisco Systems, USA

Huadong Ma, Beijing University of Posts and Telecommunications, China

Liran Ma, Texas Christian University, USA

Ashraf Matrawy, Carleton University, Canada

Claudio Mazzariello, Federico II University of Napoli, Italy

Suat Ozdemir, Gazi University, Turkey

Jianping Pan, University of Victoria, Canada

Stefano Paraboschi, University of Bergamo, Italy

Raphael Phan, Loughborough University, UK

Vincenzo Piuri, University of Milan, Italy

Erwin Rathgeb, University Duisburg-Essen, Germany

Peter Reiher, UCLA, USA

Jian Ren, Michigan State University, USA

Simon Pietro Romano, University of Napoli Federico II, Italy

Bo Rong, Communications Research Center Canada, Canada

Vassil Roussev, University of New Orleans, USA

Lifeng Sang, The Ohio State University, USA

Nitesh Saxena, Polytechnic Institute of New York University, USA

Yue Shang, The MathWorks, USA

Zhijie Shi, University of Connecticut, USA

Jing Shi, New Jersey Institute of Technology, USA

SeongHan Shin, AIST, Japan

Sabrina Sicari, Università degli Studi dell'Insubria, Italy

Sejun Song, Texas A&M University, USA

Aaron Striegel, University of Notre Dame, USA

Jinyuan (Stella) Sun, University of Tennessee, USA

Guanglu Sun, Tsinghua University, China

Keisuke Takemori, KDDI R&D Laboratories Inc., Japan

Guillaume Urvoy-Keller, University of Nice Sophia-Antipolis, France

Pramode Verma, The University of Oklahoma, USA

Giacomo Verticale, Politecnico di Milano, Italy

Zhiguo Wan, Tsinghua University, China

Haining Wang, College of William and Mary, USA

Lingyu Wang, Concordia University, Canada

Weichao Wang, University of North Carolina at Charlotte, USA

Xinyuan Wang, George Mason University, USA

Guilin Wang, University of Wollongong, Australia

Shujing Wang, Chinese Academy of Sciences, China

Feng Wang, Arizona State University, USA

Honggang Wang, University of Massachusetts Dartmouth, USA

Wei Wang, South Dakota State University, USA

Carlos Becker Westphall, Federal University of Santa Catarina, Brazil

Qianhong Wu, Universitat Rovira i Virgili, Spain

Yang Xiang, Deakin University, Australia

Yang Xiao, The University of Alabama, USA

Bin Xiao, The Hong Kong Polytechnic University, China

Gaoxi Xiao, Nanyang Technological University, Singapore

Mengjun Xie, University of Arkansas at Little Rock, USA

Kaiqi Xiong, North Carolina State University, USA

Kuai Xu, Arizona State University, USA

Shouhuai Xu, University of Texas at San Antonio, USA

Wenyuan Xu, University of South Carolina, USA

Yibo Xue, Tsinghua University, China

Guanhua Yan, Los Alamos National Laboratory, USA

Hao Yang, Nokia Research Center, USA

Danfeng Yao, Rutgers University, USA

Alec Yasinsac, University of South Alabama, USA

Fan Ye, IBM T. J. Watson Research Center, USA

Jae-Seung Yeom, Virginia Tech, USA

Seong-Moo Yoo, University of Alabama-Huntsville, USA

Ming Yu, Florida State University, USA

Wei Yu, Towson University, USA

Shucheng Yu, University of Arkansas at Little Rock, USA

Chuan Yue, University of Colorado at Colorado Springs, USA

Rui Zhang, Arizona State University, USA

Chi Zhang, University of Florida, USA

Wensheng Zhang, Iowa State University, USA

Zhenyu Zhong, Mcafee, USA

Jiazhen Zhou, Howard University, USA

Wen Tao Zhu, Graduate University of Chinese Academy of Sciences, China

Ying Zhu, Georgia State University, USA

Ye Zhu, Cleveland State University, USA

Cliff Zou, University of Central Florida, USA

#### 7. Biography of co-chairs

Yi Qian received a Ph.D. degree in electrical engineering from Clemson University. Currently he is an assistant professor in the Department of Computer and Electronics Engineering, University of Nebraska-Lincoln, located at the Peter Kiewit Institute in Omaha, NE. His research interests include information assurance and network security, computer networks, mobile wireless ad-hoc and sensor networks, wireless communications, systems and networks. Dr. Yi Qian is a veteran of telecommunications industry, academia, and U.S. government. His previous professional experience included serving as a senior member of scientific staff and a technical advisor at Nortel Networks, an assistant professor at University of Puerto Rico at Mayaguez, and a senior research member at the National Institute of Standards and Technology - a major U.S. federal government agency. He has a successful track record to lead research teams and to publish research results in leading scientific journals and conferences. Several of his recent journal articles on wireless network design and wireless network security are among the most accessed papers in the IEEE Digital Library. Dr. Yi Qian is a member of ACM and a senior member of IEEE.

**Xinwen Fu** is an assistant professor in the Department of Computer Science, University of Massachusetts Lowell. He received B.S. (1995) and M.S. (1998) in Electrical Engineering from Xi'an Jiaotong University, China and University of Science and Technology of China respectively. He obtained Ph.D. (2005) in Computer Engineering from Texas A&M University. Dr. Fu won the 2nd place in the graduate category of the International ACM student research contest in 2002, the Graduate Student Research Excellence Award of the Department of Computer Science at Texas A&M University in 2004, the Merrill Hunter Award for Excellence in Research at Dakota State University in 2008 and the best paper award at International Conference on Communications (ICC) 2008. Dr. Fu's current research interests are in network security and privacy, network forensics, computer forensics, information assurance, system reliability and networking QoS. Dr. Fu has been publishing papers in conferences such as IEEE Symposium on Security and Privacy (S&P), ACM CCS, ACM MobiHoc (ACM International Symposium on Mobile Ad Hoc Networking and Computing), IEEE International Conference on Computer Communications (INFOCOM) and IEEE International Conference on Distributed Computing Systems (ICDCS), journals such as IEEE Transactions on Parallel and Distributed Systems (TPDS) and IEEE Transactions on Computers. His research is supported by NSF

**Kui Ren** is currently an Assistant Professor of Electrical and Computer Engineering Department at the Illinois Institute of Technology. Kui received his Bachelors and Masters Degrees from Zhejiang University in 1998 and 2001, respectively and his PhD in Electrical and Computer Engineering from Worcester Polytechnic Institute in 2007. Kui's research interests include Security & Privacy in Cloud Computing, Lower-layer Attack & Defense Mechanisms for Wireless Networks, Smart Grid Security, and Sensor & Mesh Network Security. He currently leads the Ubiquitous Security & Privacy Research Laboratory at IIT, and his research is supported by US National Science Foundation, US Department of Energy, and Amazon Web Service. Kui serves as an associate editor for IEEE Wireless Communications and is the lead guest editor for IEEE Transactions on Smart Grid special issue on Cyber, Physical and System Security for Smart Grid.

**Dijiang Huang** received his Bachelor of Science degree in Telecommunications from Beijing University of Posts & Telecommunications in 1995. He received his Master of Science and PhD degrees from

University of Missouri-Kansas City in 2001 and 2004, respectively. Both majored in Computer Science and Telecommunications. He joined Computer Science and Engineering department at ASU in 2005 as an assistant professor. His current research interests are in two areas. Security and privacy: cryptography, key management, authentication protocol, attack analysis, privacy preserving, and attack resilient network design. Computer system and networking: cloud computing, network protocols design, and mobile communication. Dr. Huang's research is supported by NSF, ONR, AFRL, and Consortium of Embedded System (CES). He is a recipient of ONR Young Investigator Award 2010.