

Proposal for Special Issue on Social Network Security and Privacy

In contemporary society, social networks are playing extremely important roles. Billions of social networks users are sharing their personal data with various devices over the Internet on a daily basis. It is undeniable that social network websites and applications facilitate everyone's daily life and enormously expand their social networks. However, the drawbacks associating with social networks should never be overlooked. Among these disadvantages, the security and privacy problems are prominent, which lead to various attacks, such as the distribution of virus and malicious code, and leakage of critical personal information, such as photos, date-of-birth, locations and so on.

To tackle these drawbacks, nowadays, researchers are developing advanced techniques to analyse, prevent and detect these potential threats. This special issue intends to create an opportunity to publish high quality and state-of-art research articles in the field of social network security and privacy.

Topics

The goal of this special issue is to promote research and reflect the most recent advances in addressing the security and privacy issues on social networks. Topics of interest include, but are not limited to the ones listed below.

- Attacks in/via social networks
- Information control and detection
- Malicious behavior modeling in social networks
- Malicious information propagation via social networks
- Phishing problems in social networks
- Privacy protection in social networks
- Big data analytics for threats and attacks prediction
- Spam problems in social networks
- Trust and reputations in social networks
- Big data outsourcing
- Big data forensics
- Security and privacy in big database
- Applied cryptography for big data
- Big data system security
- Mobile social networks security
- Security and privacy in cloud
- Forensics in social networks and big data

Paper Solicitation

This issue is an open special issue where everyone is encouraged to submit papers. Papers published in this special issue will be solicited in two approaches: international symposium and open call-for-papers.

1. Selected Papers from the 2nd IEEE International Symposium on Security and Privacy in Social Networks and Big Data (IEEE SocialSec 2016)

Firstly, the best papers in the 2nd IEEE International Symposium on Security and Privacy in Social Networks and Big Data will be included in this issue. This symposium is well established in the field of social network security and privacy, and will be held between 8 Dec 2016 and 10 Dec 2016 at Yanuca Island, Fiji. It is one of the key forums of international researchers to discuss and exchange novel ideas, results, experiences and work-in-process on all aspects of security and privacy in social networks.

Based on the comments and scores given by the reviewers, as well as the presentation during the workshop, we plan to select the best papers for publication in this special issue.

2. Open Call-For-Papers

Secondly, we also plan to publicize an open call-for-paper (CFP) by sending the CFP to major academic announcement mailing lists/websites and researchers in this field all over the world. We expect that there will be a number of high quality submissions via the CFP. Some of them will be accepted for publication in this special issue.

Every paper, including those from the symposium and CFP, will go through a rigorous blind peer-review process by at least two international researchers. Since the quality is regarded as our priority, we plan to accept 8 to 10 highest quality submissions for publication.

Guest Editors

Mirosław Kutylowski (Wrocław University of Technology, Poland, email: mirosław.kutylowski@pwr.wroc.pl)

Yu Wang (Deakin University, Australia, email: y.wang@deakin.edu.au)

Shouhuai Xu (University of Texas at San Antonio, USA, email: shxu@cs.utsa.edu)

Laurence T. Yang (St. Francis Xavier University, Canada, email: ltyang@stfx.ca)

Important Dates

Submission Due: January 15, 2017

First Round Notification: April 15, 2017

Revision: June 15, 2017

Publication (expected): Late 2017

Short Biography of Proposed Guest Editors

Mirosław Kutylowski (Wrocław University of Technology, Poland)

Mirosław Kutylowski is a full professor at Wrocław University of Technology in south-west Poland. He is also a member of Scientific Board of Institute of Computer Science, Wrocław University of Technology. In 2012 he was elected to the Central Committee for Academic Degrees and Titles in Poland, where he is responsible for computer science.

In the past he was awarded Alexander-von-Humboldt Fellowship. During his academic career he spent many years at Technical University of Darmstadt and Heinz Nixdorf Institute at Paderborn University. Since 2000 he holds a position at Faculty of Fundamental Problems of Technology at Wrocław University of Technology, where he established a research group working on distributed algorithms, privacy, security and cryptography. Recently he was awarded by a MISTRZ Prize by Foundation for Polish Science and IBM Faculty Award for achievements in cyber security.

Particular recent research interests of Prof. Kutylowski in the field of security are anonymous communication protocols, e-voting, and protocols for personal identity documents as well as legal issues of security in information and communication technology. Recently, he was involved deeply in the legal and technical part of e-voting and e-court projects in Poland. In his team he pursues the goal of developing a new generation of authentication and signature systems based on electronic identity documents.

Yu Wang (Deakin University, Australia)

Dr Yu Wang received his PhD from Deakin University, Australia in 2013. He is currently with School of Information Technology, Deakin University. His research interests include network and system security, network traffic analysis, and social networks. He is the Program Committee co-chair of the 10th International Conference on Green, Pervasive and Cloud Computing (GPC 2015) and 16th International Conference on Computer and Information Technology (CIT 2016).

Shouhuai Xu (University of Texas at San Antonio, USA)

Shouhuai Xu is a Full Professor in the Department of Computer Science, University of Texas at San Antonio. He is Director of the Laboratory for Cybersecurity Dynamics (<http://www.cs.utsa.edu/~shxu/LCD/index.html>). His research is primarily in making cyberspace secure and trustworthy. He is especially interested in both theoretical modeling/analysis of cybersecurity and devising practical cyber defense techniques (e.g., provably-secure cryptographic protocols and other advanced cyber defense mechanisms). His research has been funded by AFOSR, ARO, NSF and ONR. He was a Program Committee co-chair of NSS'15 and Inscrypt'13. He co-initiated the ACM Scalable Trusted Computing Workshop (ACM STC). He has served on the Program Committees of numerous international conferences/workshops. He is currently an Associate Editor of IEEE Transactions on Dependable and Secure Computing (IEEE TDSC) and IEEE Transactions on Information Forensics and Security (IEEE T-IFS). He earned his PhD in Computer Science from Fudan University.

Laurence T. Yang (St. Francis Xavier University, Canada)

Prof. Laurence T. Yang graduated from Tsinghua University, China and got his Ph.D in Computer Science from University of Victoria, Canada. He joined St. Francis Xavier University in 1999. His current research includes parallel and distributed computing, embedded and ubiquitous/pervasive computing.

He has published many papers in various refereed journals, conference proceedings and book chapters in these areas (including around 100 international journal papers such as IEEE Transactions on Computers, IEEE Journal on Selected Areas in Communications, IEEE Transactions on System, Man and Cybernetics, IEEE Transactions on Very Large Scale Integration Systems, IEEE Transactions on Industrial Informatics, IEEE Transactions on Information Technology in Biomedicine, IEEE Transactions on Parallel and Distributed Systems, IEEE Transactions on Circuit and Systems, IEEE Transactions on Service Computing, ACM Transactions on Embedded Computing Systems, IEEE Systems Journal, ACM Transactions on Autonomous and Adaptive Systems, IEEE Transactions on Vehicular Technology, IEEE Intelligent Systems, etc).

He has been involved actively in conferences and workshops as a program/general/steering conference chair (mainly as the steering co-chair of IEEE UIC/ATC, IEEE CSE, IEEE HPCC, IEEE/IFIP EUC, IEEE ISPA, IEEE PiCom, IEEE EmbeddedCom, IEEE iThings, IEEE GreenCom, etc) and numerous conference and workshops as a program committee member. He served as the vice-chair of IEEE Technical Committee of Supercomputing Applications (TCSA) until 2004, was the chair (elected in 2008 and 2010) of IEEE Technical Committee of Scalable Computing (TCSC), the chair of IEEE Task

force on Ubiquitous Computing and Intelligence (2009-). He was also in the steering committee of IEEE/ACM Supercomputing conference series (2008-2011), and the National Resource Allocation Committee (NRAC) of Compute Canada (2009-2013).

In addition, he is the editors-in-chief of several international journals. He is serving as an editor for many international journals. He has been acting as an author/co-author or an editor/co-editor of many books from Kluwer, Springer, Nova Science, American Scientific Publishers and John Wiley & Sons. He has won several Best Paper Awards (including IEEE Best and Outstanding Conference Awards such as the IEEE 20th International Conference on Advanced Information Networking and Applications (IEEE AINA-06), etc); one Best Paper Nomination; Distinguished Achievement Award, 2005; Canada Foundation for Innovation Award, 2003. He has been invited to give around 30 keynote talks at various international conferences and symposia.