

# Fengjun Li

## PERSONAL INFORMATION

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Assistant Professor  
Electrical Engineering & Computer Science  
The University of Kansas  
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## RESEARCH INTERESTS

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- ◇ Information Security and Privacy
- ◇ Smart Grid and Cyber Physical System Security
- ◇ Network Security, Internet Anonymous Communications
- ◇ Social Media and Social Network Analysis
- ◇ E-health System Security, Health Informatics

## EDUCATION

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### **The Pennsylvania State University**

Ph.D. in Information Sciences and Technology, December 2010  
Dissertation title: *Secure and Privacy-Preserving Information Brokering*  
Advisor: Dr. Peng Liu and Dr. Chao-Hsien Chu

### **The Chinese University of Hong Kong**

M.Phil. in Information Engineering, December 2004  
Thesis title: *Fairness Index in Communication Networks*  
Advisor: Dr. Wing Shing Wong

### **University of Science and Technology of China**

B.E. in Automation, July 2001  
Thesis title: *Automatic Control of Pottery Furnace using Controller Area Network*  
Outstanding Bachelor Thesis Award of USTC  
Advisor: Dr. Peiren Zhang

## EMPLOYMENT

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- ◇ Assistant Professor, The University of Kansas 2011 - present
- ◇ Research Assistant, The Pennsylvania State University 2005 - 2010
- ◇ Research Assistant, The Chinese University of Hong Kong 2002 - 2004
- ◇ Software Engineer, Wisisoft Co., Ltd., China August - December 2001

## AWARDS AND HONORS

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- ◇ Miller Scholar Award, School of Engineering, The University of Kansas, 2016
- ◇ Best Paper Award, 11th EAI International Conference on Security and Privacy in Communication Networks (SecureComm'15), October 2015
- ◇ Best Poster Award, 4th Central Area Networking and Security Workshop (CANSec'13), November 2013
- ◇ NSF Student Travel Award, 29th IEEE INFOCOM, March 2010
- ◇ ACM Student Travel Award, 14th ACM CCS, October 2007
- ◇ NSF Student Travel Award, Network and Computer Security Workshop, 2006
- ◇ Outstanding Bachelor Thesis Award, University of Science and Technology of China, 2001.

## PUBLICATIONS

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### Refereed Journals:

1. Lei Yang and Fengjun Li. "Securing Smart Grid In-Network Aggregation through False Data Detection," *EAI Transactions on Industrial Networks and Intelligent Systems*, Special Issue on CI & Smart Grid Cyber Security. In press.
2. Fengjun Li, Bo Luo, Dongwon Lee, Peng Liu, and Chao-Hsien Chu. "Enforcing Secure and Privacy-Preserving Information Brokering in Distributed Information Sharing," *IEEE Transactions on Information Forensics & Security*, 8(6):888-900, June 2013.
3. Fengjun Li, Xukai Zhou, Peng Liu, and Jake Y. Chen. "New Threats to Health Data Privacy," *BMC Bioinformatics*, 12(Suppl. 12):S7, 2011.
4. Fengjun Li, Bo Luo, and Peng Liu, "Secure and Privacy-Preserving Information Aggregation for Smart Grids," *International Journal on Security and Networks, Special Issue on Security and Privacy in Smart Grid*, 6(1): 28-39, 2011.
5. Fengjun Li, Bo Luo, Dongwon Lee, Prasenjit Mitra, Wang-Chien Lee, Chao-Hsien Chu, and Peng Liu. "In-broker Access Control for Information Brokerage Systems," *International Journal on Intelligent Control and Systems, Special Issue on Information Assurance*, 12(4): 283-292, 2007.
6. Wing S. Wong and Fengjun Li. "Fairness Indices and Distributed Control in Communication Networks," *Communication in Information and Systems*, 6(2): 83-114, 2006.

### Refereed Conferences & Workshops:

1. Lei Yang, Abdulmalik Humayed, and Fengjun Li. "A Multi-Cloud based Privacy-Preserving Data Publishing Scheme for the Internet of Things." In *Proceedings of the 32nd Annual Computer Security Applications Conference (ACSAC)*, Los Angeles, CA, December 2016.
2. H. Seo, F. Li, R. Pluretti, H. Xue, and S. Velma. "Perceptions of Online Reviews: Motivation, Sidedness, and Reviewer Information." To be presented at *Association for Education in Journalism and Mass Communication Annual Conference*, Minneapolis, MN. August 2016.
3. Lei Yang and Fengjun Li. "Enhancing Traffic Analysis Resistance for Tor Hidden Services with Multipath Routing." In *Proc. of the 11th EAI International Conference on Security and Privacy in Communication Networks (SecureComm)*, Dallas, TX. October 2015. (**Best Paper Award**)
4. Fengjun Li, Xin Fu, and Bo Luo. "A Hardware Fingerprint Using GPU Core Frequency Variations." In *Proc. of the 22nd ACM Conference on Computer and Communications Security (CCS)*, Denver, CO. October 2015. (Poster paper)
5. Lei Yang and Fengjun Li. "mTor: A Multipath Tor Routing beyond Bandwidth Throttling." In *Proc. of the IEEE Conference on Communications and Network Security (CNS)*, Florence, Italy. September 2015.

6. Lei Yang and Fengjun Li. "Tor Multipath Routing: Enhancing Traffic Analysis Resistance for Tor Hidden Services." In *Proc. of the IEEE Conference on Communications and Network Security (CNS)*, Florence, Italy. September 2015. (Poster paper)
7. H. Seo, F. Li, J. Lim, R. Pluretti, H. Xue, and S. Vekapu. "User Ratings of Yelp Reviews: A Big Data Analysis Approach." In *Association for Education in Journalism and Mass Communication Annual Conference*, San Francisco, CA. August 2015.
8. H. Xue, F. Li, H. Seo, and R. Pluretti. "Trust-Aware Review Spam Detection." In *Proc. of the 14th IEEE International Conference on Trust, Security and Privacy in Computing and Communications (TrustCom)*, Symposium on Recent Advances of Trust, Security and Privacy in Computing and Communications, Helsinki, Finland. August 2015.
9. H. Seo, F. Li, R. Pluretti, H. Xue, and S. Vekapu. "Perceived Usefulness of Online Reviews: Effects of Review Characteristics and Reviewer Attributes." In *the 65th International Communication Association Annual Conference*, San Juan, Puerto Rico. May 2015.
10. Quanwei Cai, Jingqiang Lin, Fengjun Li, and Qiong Xiao Wang. "SEDB: Building Secure Database Services for Sensitive Data." In *Proc. of the 16th International Conference on Information and Communications Security (ICICS)*, Hong Kong. December 2014.
11. Lei Yang, Hao Xue, and Fengjun Li. "Privacy-preserving Data Management in Smart Grid Systems." In *Proc. of the 5th IEEE International Conference on Smart Grid Communications (SmartGridComm)*, Venice, Italy. November 2014.
12. Quanwei Cai, Jingqiang Lin, Fengjun Li, Qiong Xiao Wang, and Daren Zha. "EFS: Efficient and Fault-Scalable Byzantine Fault Tolerant Systems against Faulty Clients." In *Proc. of the 10th International Conference on Security and Privacy in Communication Networks (SecureComm)*, Beijing, China. September 2014.
13. Le Guan, Fengjun Li, Jiwu Jing, Jing Wang, and Ziqiang Ma. "virtio-ct: A Secure Cryptographic Token Service in Hypervisors." In *International Workshop on Data Protection in Mobile and Pervasive Computing (DAPRO)*, Beijing, China. September 2014.
14. Lei Yang and Fengjun Li. "Detecting False Data Injection in Smart Grid In-Network Aggregation." In *Proc. of the 4th IEEE International Conference on Smart Grid Communications (SmartGridComm)*, Vancouver, Canada. October 2013.
15. Yingying Ma and Fengjun Li. "Detecting Review Spam: Challenges and Opportunities." In *Collaborative Communities for Social Computing (CCSocialComp) Workshop*, Pittsburgh, PA. October 2012.
16. Fengjun Li and Bo Luo. "Preserving Data Integrity for Smart Grid Data Aggregation." In *Proc. of the 3rd IEEE International Conference on Smart Grid Communications (SmartGridComm)*, Tainan, Taiwan. November 2012.
17. Yuhao Yang, Jonathan Lutes, Fengjun Li, Bo Luo, and Peng Liu. "Stalking Online: on User Privacy in Social Networks." In *Proc. of the ACM Conference on Data and Application Security and Privacy (CODASPY)*, San Antonio, TX, USA. February 2012.
18. Fengjun Li, Yuxin Chen, Bo Luo, Dongwon Lee, and Peng Liu. "Privacy Preserving Group Linkage." In *Proc. of the 23rd Scientific and Statistical Database Management Conference (SSDBM)*, Portland, OR, USA. July 2011.
19. Fengjun Li, Bo Luo, and Peng Liu. "Secure Information Aggregation for Smart Grids Using Homomorphic Encryption." In *Proc. of the 1st IEEE Conference on Smart Grid Communications (SmartGridComm)*, Gaithersburg, MD, USA. October 2010.
20. Fengjun Li, Jake Y. Chen, Xukai Zou, and Peng Liu. "New Privacy Threats in Healthcare Informatics: When Medical Records Join the Web." In *the 9th International Workshop on Data Mining in Bioinformatics (BIOKDD)*, Washington D.C., USA. July 2010.

21. Fengjun Li, Bo Luo, Peng Liu, Chao-Hsien Chu. "A Node-failure-resilient Anonymous Communication Protocol through Commutative Path Hopping." In *Proc. of the IEEE Conference on Computer Communications (INFOCOM)*, San Diego, CA. March 2010.
22. Fengjun Li, Bo Luo, Peng Liu, Anna Squicciarini, Dongwon Lee, and Chao-Hsien Chu. "Defending against Attribute-Correlation Attacks in Privacy-Aware Information Brokering." In *Proc. of the 4th International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom)*, Orlando, FL, USA. 2008. (Invited paper)
23. Fengjun Li, Bo Luo, Peng Liu, Dongwon Lee, and Chao-Hsien Chu. "Automaton Segmentation: A New Approach to Preserve Privacy in XML Information Brokering." In *Proc. of the 14th ACM Conference on Computer and Communication Security (CCS)*, Alexandria, VA, USA, October 2007.
24. Fengjun Li, Bo Luo, Dongwon Lee, Prasenjit Mitra, Wang-Chien Lee, Chao-Hsien Chu, and Peng Liu. "In-broker Access Control: Towards Efficient End-to-End Performance of Information Brokerage Systems." In *Proc. of the IEEE International Conference on Sensor Networks, Ubiquitous, and Trustworthy Computing (SUTC)*, Taiwan. June 2006.
25. Wing S. Wong and Fengjun Li. "A Fairness Index for Communication Networks." In *Springer Lecture Notes in Control and Information Sciences*, vol. 321, pp. 389-400, September 2005.

#### PRESENTATIONS AND INVITED TALKS

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1. "A Multi-Cloud based Privacy-Preserving Data Publishing Scheme for the Internet of Things." In the 32nd Annual Computer Security Applications Conference, Los Angeles, CA. December 2016.
2. "Secure and Privacy-Preserving Data Collection and Publishing for the Internet-of-Things." Invited talk at MasterCard STLCyberCon 2016, St. Louis, MO. November 2016.
3. "Securing Web Communications." Invited talk at Zhejiang Gongshang University, Hangzhou, China. October, 2016.
4. "Tor Anonymous Network and Hidden Services." Invited talk at the 2016 KU EECS Advisory Board Meeting, Lawrence, KS. April 29, 2016.
5. "Security in Internet of Things: Issues, Challenges, and Opportunities." Guest Lecture in *EECS700: Special Topics on Internet of Things*, Lawrence, KS. April 22, 2016.
6. "Enhancing Traffic Analysis Resistance for Tor Hidden Services with Multipath Routing." In the 11th EAI International Conference on Security and Privacy in Communication Networks (*SecureComm*), Dallas, TX. October 28, 2015.
7. "From Seeding to Cultivation - Regional and National Cyber Security Workforce Development." Panel in the 8th Central Area Networking and Security Workshop (*CANSec*), Little Rock, AR. October 24, 2015.
8. "A Hardware Fingerprint Using GPU Core Frequency Variations." In the 22nd ACM Conference on Computer and Communications Security (*CCS*), Denver, CO. October 13, 2015.
9. "mTor: A Multipath Tor Routing beyond Bandwidth Throttling." In the *IEEE Conference on Communications and Network Security (CNS)*, Florence, Italy. September 29, 2015.
10. "Enhancing Traffic Analysis Resistance for Tor Hidden Services with Multipath Routing." In the *IEEE Conference on Communications and Network Security (CNS)*, Florence, Italy. September 28, 2015.
11. "Social Collaborative Systems: Data Analysis and Visualization." In *KU Red Hot Research*, Lawrence, KS. September 18, 2015.
12. "Trust-Aware Review Spam Detection." In the 14th *IEEE TrustCom*, Symposium on Recent Advances of Trust, Security and Privacy in Computing and Communications, Helsinki, Finland. August 21, 2015.

13. "New Security and Privacy Challenges in the Networked Age." In *KU Red Hot Research*, Lawrence, KS. March 6, 2015.
14. "Privacy-preserving Data Management in Smart Grid Systems." In the *5th IEEE International Conference on Smart Grid Communications (SmartGridComm)*, Venice, Italy. November 2014.
15. "Secure and Privacy-Preserving Smart Metering." Invited talk at the *Department of Computer Science, Wayne State University*, Detroit, MI. October 14, 2014.
16. "Secure and Privacy-Preserving In-Network Data Aggregation in Smart Grid." Invited talk at the *Department of Chemical & Petroleum Engineering, the University of Kansas*, Lawrence, KS. September 30, 2014.
17. "Detecting Spam Reviews in Online Shopping Communities." Invited talk at the *Data Assurance and Communication Security Research Center, Chinese Academy of Sciences*, Beijing, China. June 2014.
18. "Detecting False Data Injection in Smart Grid In-Network Aggregation." In the *4th IEEE SmartGridComm*, Vancouver, Canada. October 2013.
19. "Privacy Preserving Smart Metering with Data Authentication and False Data Injection Protection." Invited talk at the *State Key Laboratory of Information Security, Chinese Academy of Sciences*, Beijing, China. June 2013.
20. "Preserving Data Integrity for Smart Grid Data Aggregation." In the *3rd IEEE Conference on Smart Grid Communications*, Tainan, Taiwan. November 2012.
21. "Detecting Review Spam: Challenges and Opportunities." In the *Collaborative Communities for Social Computing Workshop*, Pittsburgh, PA. October 2012.
22. "Secure and Efficient Data Aggregation in Smart Grids." Invited talk at the *State Key Laboratory of Information Security, Chinese Academy of Sciences*, Beijing, China. July 2012.
23. "A Node-failure-resilient Anonymous Communication Protocol through Commutative Path Hopping." In the *29th IEEE Conference on Computer Communications (INFOCOM)*, San Diego, CA. March 2010.
24. "CAT: Commutative Anonymous Tunnel." In the *LIONS Center Seminar Series, Pennsylvania State University*, State College, PA. March, 2010.
25. "Anonymous Communications." In the *iSymposium, Pennsylvania State University*, State College, PA. February 2010.
26. "Automaton Segmentation: A New Approach to Preserve Privacy in XML Information Brokering." In the *14th ACM Conference on Computer and Communication Security (CCS)*, Alexandria, VA. November 2007.
27. "Secure and Privacy-Preserving Information Sharing." Invited talk at *Integrative Theories and Methods Seminar, Pennsylvania State University*, State College, PA. October 2007.
28. "Security and Privacy in Information Brokerage Systems." In the *2nd Network and Computer Security Workshop*, Lehigh, PA. August 2005.

## PROFESSIONAL ACTIVITIES

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### Journal Editorial Board Member:

- ◇ International Journal on Security (IJS). (2012 - present)
- ◇ JSM Computer Science & Engineering. (2013 - present)

### Steering Committee Member:

- ◇ Central Area Networking and Security Workshop. (2014 - present)

**Program Committee Member:**

- ◇ 31st Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy. (July 2017)
- ◇ 4th International Symposium on Intelligent Informatics, *in conjunction with the Fifth International Conference on Advances in Computing, Communications and Informatics*. (September 2016)
- ◇ 4th International Symposium on Security in Computing and Communications. (September 2016)
- ◇ 6th International Conference on Smart Grids, Green Communications and IT Energy-aware Technologies. (June 2016)
- ◇ SmartGrid Resilience (SGR) Workshop. (December 2015)
- ◇ International Conference on Advances in Computing, Communications and Informatics. (August 2015)
- ◇ Workshop on Scalable Data Analytics: Theory and Applications. (2014-2015)
- ◇ Workshop on Scalable Machine Learning: Theory and Applications. (October 27, 2014)
- ◇ International Workshop on Data Protection in Mobile and Pervasive Computing (DAPRO). (September 2014)
- ◇ Workshop on Scalable Data Analytics: Theory and Applications. (May 2014)
- ◇ 9th IEEE International Conference on Intelligent Sensors, Sensor Networks and Information Processing. (April 2014)
- ◇ 5th Central Area Networking and Security Workshop. (April 2014)
- ◇ 4th IEEE International Conference on Smart Grid Communications. (October 2013)
- ◇ Big Data in Bioinformatics and Health Informatics Workshop, *in conjunction with the IEEE International Conference on Big Data*. (October 2013)
- ◇ Greater Kansas Area Security Workshop. (2012-2013)
- ◇ ACM Conference on Information and Knowledge Management. (October 2012)
- ◇ 1st IEEE International Conference on Healthcare Informatics, Imaging and Systems Biology. (July 2011)

**Session Chair:**

- ◇ IEEE International Conference on Bioinformatics and Biomedicine. (November 2015)
- ◇ IEEE International Conference on Trust, Security and Privacy in Computing and Communications. (August 2015)
- ◇ IEEE International Conference on Smart Grid Communications. (October 2013)

**Journal External Reviewer:**

- ◇ IEEE Transactions on Smart Grid. (2013 - present)
- ◇ IEEE Transactions on Dependable and Secure Computing. (2012 - present)
- ◇ Elsevier Computer & Security. (2011 - present)
- ◇ IEEE Transactions on Information Forensics & Security. (2015)
- ◇ Future Generation Computer Systems. (2015)
- ◇ Information Security Journal: A Global Perspective. (2015)
- ◇ Security and Communication Networks. (2013 - 2015)
- ◇ Entropy. (2014)
- ◇ IEEE Transactions on Knowledge and Data Engineering. (2014)
- ◇ ACM Computing Surveys. (2013)
- ◇ IEEE Journal on Selected Area in Communications. (2013)
- ◇ International Journal of Communication Systems. (2013)
- ◇ Springer Software and Systems Modeling. (2013)
- ◇ Elsevier Computer Networks. (2012 - 2013)

- ◇ IEEE Transaction on Wireless Communications. (2012 - 2013)
- ◇ IEEE Transactions on Industrial Informatics. (2012)
- ◇ Elsevier Computer Standards & Interfaces. (2012)
- ◇ Elsevier Systems and Software. (2012)
- ◇ Applied Clinical Informatics Journal. (2012)

**Conference & Workshop Reviewer:**

ACM CCS, ESORICS, CODASPY, ASIACCS; IEEE SmartGridComm, CIKM, INFOCOM ,  
ICDCS, ICDE, GLOBECOM, ICC, PASSAT, WCNC, ACSAC, ICICS; Big Data Workshop, DB-  
Sec, SGSC, WISH, WISTP, etc.