

Jianqing Liu, Ph.D.

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University of Alabama in Huntsville, Huntsville, AL 35899
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EDUCATION

- University of Florida** August 2018
Ph.D. in Electrical and Computer Engineering
• Advisor: Dr. Yuguang “Michael” Fang
- University of Electronic Science and Technology of China** June 2013
B.Eng. in Electrical Engineering

RESEARCH EXPERIENCE

- Assistant Professor** August 2018 - Now
ECE Department, University of Alabama in Huntsville
◇ Supervising Ph.D. students and conducting research on cybersecurity and wireless networking for applications in mobile health, Internet-of-Things and advanced wireless systems.
- Research Assistant** September 2014 - July 2018
Wireless Networks Laboratory, ECE Department, University of Florida
◇ Worked on 3 NSF projects and published 13 technical papers.
- Research Intern** May 2014 - August 2014
Teledyne LeCroy, Chestnut Ridge, NY, USA
◇ Developed RF front-end power amplifiers with SiGe BiCMOS and InP technology.

TEACHING EXPERIENCE

- Instructor** 2018 - Now
◇ CPE348: Intro. to Computer Networks, ECE Department, University of Alabama in Huntsville, Fall’18, Spring’19
- Teaching Assistant** 2013 - 2017
◇ EEL6591: Wireless Networks, ECE Department, University of Florida, Spring’17
◇ EEL4598/5718: Computer Communications, ECE Department, University of Florida, Fall’16
◇ 14:332:382: Electromagnetic Fields, ECE Department, Rutgers University, Spring’14
◇ 14:332:363: Electronic Devices Laboratory, ECE Department, Rutgers University, Fall’13

PUBLICATIONS AND PRESENTATIONS

Referred Journal Articles

- [1] **Jianqing Liu**, Chi Zhang, and Yuguang Fang, “*EPIC: A Differential Privacy Framework to Defend Smart Homes Against Internet Traffic Analysis*,” IEEE Internet of Things Journal (**IoT Journal**), Vol. 5, no. 2, pp. 1206-1217, April 2018.
- [2] **Jianqing Liu**, Chi Zhang, Beatriz Lorenzo, and Yuguang Fang, “*DPavatar: A Real-time Location Protection Framework for Incumbent Users in Cognitive Radio Networks*,” IEEE Transactions on Mobile Computing (**TMC**), major revision (2nd round).

- [3] **Jianqing Liu**, Haichuan Ding, Ying Cai, Hao Yue, Yuguang Fang and Shigang Chen, “*An Energy-Efficient Strategy for Secondary Users in Cooperative Cognitive Radio Networks for Green Communications*,” IEEE Journal on Selected Areas in Communications (**JSAC**), Vol. 34, no. 12, pp. 3195-3207, December 2016 (**IEEE TCGCC Best Journal Paper Award**).
- [4] **Jianqing Liu**, Kaijun Song, and Yong Fan, “*UWB BPF with Triple Notched bands Using Novel Dual-mode SIR and Asymmetrical Coupling Structure*,” Journal of ElectroMagnetic Waves and Applications (**JEMWA**), Vol.26, No.16, 2112-2120, November 2012.
- [5] Jing Han, Yanping Li, **Jianqing Liu**, and Minghao Zhao, “*An Efficient Lucas Sequence-based Batch Auditing Scheme for the Internet of Medical Things*,” IEEE Access, Accepted.
- [6] Yawei Pang, Haichuan Ding, **Jianqing Liu**, Yuguang Fang, and Shigang Chen, “*A UHF RFID based System for Children Tracking*,” IEEE Internet of Things Journal (**IoT Journal**), Accepted.
- [7] Beatriz Lorenzo, Alireza Shafiq, **Jianqing Liu**, Francisco Gonzalez-Castano, and Yuguang Fang, “*Data and Spectrum Trading Policies in a Trusted Cognitive Radio Dynamic Network Architecture*,” IEEE/ACM Transactions on Networking (**TON**), Vol. 26, no. 3, pp. 1502-1516, May 2018.
- [8] Haichuan Ding, Chi Zhang, Xuanheng Li, **Jianqing Liu**, Miao Pan, Yuguang Fang and Shigang Chen, “*Session-Based Cooperation in Cognitive Radio Networks: A Network-Level Approach*,” IEEE/ACM Transactions on Networking (**TON**), Vol. 26, no. 2, pp. 685-698, April 2018.
- [9] Bing Feng, Chi Zhang, **Jianqing Liu** and Yuguang Fang, “*Turning Waste into Wealth: Free Control Message Transmissions in Indoor WiFi Networks*,” IEEE Transactions on Mobile Computing (**TMC**), major revision (2nd round).
- [10] Shunrong Jiang, Xiaoyan Zhu, Linke Guo, and **Jianqing Liu**, “*Publicly Verifiable Boolean Query Over Outsourced Encrypted Data*,” IEEE Transactions on Cloud Computing (**TCC**), *Early Access* 2017.

Referred Conference Articles

- [1] **Jianqing Liu**, Yaodan Hu, Hao Yue, Yanmin Gong, and Yuguang Fang, “*A Cloud-based Secure and Privacy-Preserving Clustering Analysis of Infectious Disease*,” IEEE Symposium on Privacy-Aware Computing (**PAC**), Washington D.C., USA, 2018.
- [2] **Jianqing Liu**, Chi Zhang, Haichuan Ding, Hao Yue, and Yuguang Fang, “*Policy-based Privacy-Preserving Scheme for Primary Users in Database-driven Cognitive Radio Networks*,” IEEE Global Communications Conference (**GLOBECOM**), Washington D.C., USA, 2016.
- [3] **Jianqing Liu**, Hao Yue, Haichuan Ding, Pengbo Si, and Yuguang Fang, “*An Energy Efficient Cooperative Strategy for Secondary Users in Cognitive Radio Networks*,” IEEE Global Communications Conference (**GLOBECOM**), San Diego, USA, 2015.
- [4] **Jianqing Liu**, Kaijun Song, Tao Pan, Jiahong Zha, Yong Fan, and Cuilin Zhong “*Ultra-Wideband (UWB) Bandpass Filter with Inductance-Loaded Y-Shaped Multiple-Mode Resonator*,” IEEE International Workshop on Microwave & Millimeter Wave Circuits & System Technology (**MMWCST**), Chengdu, China, 2012 (**Best Paper Award**).
- [5] Shunrong Jiang, **Jianqing Liu**, Mengjie Duan, Liangmin Wang, and Yuguang Fang, “*Secure and Privacy-Preserving Report De-duplication in the Fog-Based Vehicular Crowdsensing System*,” IEEE Global Communications Conference (**GLOBECOM**), Abu Dahbi, UAE, 2018.
- [6] Shunrong Jiang, **Jianqing Liu**, Liangmin Wang, and Yuguang Fang, “*A Secure Data Forwarding Scheme in Vehicular Named Data Networking*,” IEEE Global Communications Conference (**GLOBECOM**), Abu Dahbi, UAE, 2018.
- [7] Di Han, Wei Chen, **Jianqing Liu**, and Yuguang Fang, “*A Probabilistic Scheduling Policy for Energy Efficient UAV Communications with Delay Constraints*,” IEEE Global Communications Conference (**GLOBECOM**), Abu Dahbi, UAE, 2018.
- [8] Hengyu Zhou, Yukun Niu, **Jianqing Liu**, Chi Zhang, Lingbo Wei, and Yuguang Fang, “*A Privacy-Preserving Networked Hospitality Service with the Bitcoin Blockchain*,” The 13th International Conference on Wireless Algorithms, Systems, and Applications (**WASA**), Tianjin, China, 2018.
- [9] Bing Feng, **Jianqing Liu**, Chi Zhang, and Yuguang Fang, “*Communication through Symbol Si-*

lence: *Towards Free Control Messages in Indoor WLANs*,” IEEE International Conference on Distributed Computing Systems (**ICDCS**), Atlanta, USA, 2017 (*acceptance ratio: 16.9%*).

[10] Yaodan Hu, Xuanheng Li, **Jianqing Liu**, Haichuan Ding, Yanmin Gong, and Yuguang Fang, “*Mitigating Traffic Analysis Attack in Smartphones with Edge Network Assistance*,” IEEE International Conference on Communications (**ICC**), Kansas City, Missouri, 2018.

[11] Yukun Niu, Lingbo Wei, Chi Zhang, **Jianqing Liu**, and Yuguang Fang, “*An Anonymous and Accountable Authentication Scheme for Wi-Fi Hotspot Access with the Bitcoin Blockchain*,” IEEE/CIC International Conference on Communications in China (**ICCC**), Qingdao, China, 2017.

[12] Haichuan Ding, Hao Yue, **Jianqing Liu**, Pengbo Si, and Yuguang Fang, “*Energy-Efficient Secondary Traffic Scheduling with MIMO Beamforming*,” IEEE Global Communications Conference (**GLOBECOM**), San Diego, USA, 2015.

[13] Shunrong Jiang, Xiaoyan Zhu, Linke Guo, and **Jianqing Liu**, “*Publicly Verifiable Boolean Query Over Outsourced Encrypted Data*,” IEEE Global Communications Conference (**GLOBECOM**), San Diego, USA, 2015.

Selected Scholarly Presentations

[1] “*A Cloud-based Secure and Privacy-Preserving Clustering Analysis of Infectious Disease*,” IEEE PAC, Washington D.C., USA, 2018.

[2] “*Towards Secure and Privacy-Preserving Design in CPS: A Case Study on Connected Smart Homes*,” Department of Electrical and Computer Engineering, Florida State University, 2018.

[3] “*Communication through Symbol Silence: Towards Free Control Messages in Indoor WLANs*,” IEEE ICDCS, Atlanta, USA, 2017.

[4] “*Policy-based Privacy-Preserving Scheme for Primary Users in Database-driven Cognitive Radio Networks*,” IEEE GLOBECOM, Washington D.C., USA, 2016.

PROFESSIONAL SERVICES

Member of the Technical Program Committee for

- IEEE International Conference on Communications (**ICC**), 2018, 2019
- IEEE/CIC International Conference on Communications in China (**ICCC**), 2017, 2018

Selected Reviewers for Journal Submissions

- IEEE Transactions on Vehicular Technology (**TVT**)
- IEEE Transactions on Mobile Computing (**TMC**)
- IEEE Transactions on Big Data (**TBD**)
- IEEE Transactions on Industrial Informatics (**TII**)
- IEEE Transactions on Green Communications and Networking (**TGCN**)
- IEEE Wireless Communications Letters
- IEEE Network Magazine
- IEEE Wireless Communications Magazine
- IEEE Communications Magazine
- ACM Computing Surveys

Selected Reviewers for Conference Submissions

- IEEE ICC’18,19
- IEEE ICDCS’17

Others

- System Administrator, IEEE Transactions on Vehicular Technology 2014-2017
- Reviewer, University of Florida Student Travel Grant 2017-2018

HONORS AND AWARDS

- Best Journal Paper Award, IEEE Tech. Committee on Green Comm. & Comp. May 2018
- Student Travel Grant for IEEE ICDCS, IEEE Computer Society May 2017
- Graduate Student Travel Grant, University of Florida March 2017

Student Travel Grant for IEEE GLOBECOM, National Science Foundation (NSF)
Graduate Student Fellowship, University of Florida
Outstanding Graduate of Sichuan Province, Sichuan, China
Best Paper Award, IEEE International Workshop on MMWCST

November 2016
2014 - 2018
March 2013
April 2012