Jianqing Liu

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Citizenship

P.R. China

Education

PhD, Department of Electrical and Computer Engineering 2014-2018 (*expected*)
University of Florida, Gainesville, Florida, USA

B.Eng (Hons.), Department of Electrical Engineering 2009-2013
University of Electronic Science & Tech. of China (UESTC), Chengdu, China

Research Experiences

Research Assistant, Wireless Network Laboratory, UF Aug. 2014-Present

- Developing communication protocols in the cognitive radio networks to promote energy-efficient, high throughput and secure & private spectrum sharing. Theoretical tools such as convex optimization, ADMM, probability models are frequently used.

Analog IC Design Intern, Teledyne LeCroy, NY May 2014-Aug. 2014

- Worked on microwave monolithic front-end chips with state-of-the-art SiGe BiCMOS 8HP and InP technology for use in high performance oscilloscopes.
- Designed several reconfigurable power amplifiers with 3-dB bandwidth of 0-13GHz, 0-30GHz and etc. Designed the biasing circuitry and matching networks for different chip sets.

Research Assistant, Research Institute of Electronic Science and Technology, UESTC Oct. 2010-July 2013

- Designed a novel Ka band high isolation 3dB power divider. Characterizations with >13 dB isolation, >12 dB return loss, ±0.05 dividing equality were obtained from 28 to 32GHz.
- Assisted in designing and characterized a Doherty power amplifier with a shunt open micro-strip line π-type output network. >10 dB power gain, 45.75% drain efficiency and 43.5 dBm output power at -30 dBc ACLR were obtained.

Publications

Refereed Journals

1. **Jianqing Liu**, H. Ding, Y. Cai, H. Yue, and Y. Fang, "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.
2. **Jianqing Liu**, K. Song and Y. 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, Nov.2012, 2112-2120.
3. S. Jiang, X. Zhu, L. Guo and **Jianqing Liu**, "Publicly Verifiable Boolean Query Over Outsourced Encrypted Data," *Early Access*, IEEE Transactions on Cloud Computing **(TCC)**.
4. S. Jiang, L. Wang, **Jianqing Liu** and H. Ding, "An Efficient and Secure Data Forwarding Scheme in Vehicular Named Data Networking," *Under Review*, IEEE Transactions on Intelligent Transportation Systems **(TITS)**.
5. H. Ding, C. Zhang, X. Li, **Jianqing Liu**, M. Pan, Y. Fang and S. Chen, "Session-Based Cooperation in Cognitive Radio Networks: A Network-Level Approach," *Major Revision*, IEEE Transactions on Networking **(ToN)**.

Conference Papers

1. **Jianqing Liu**, C. Zhang, H. Ding, H. Yue and Y. Fang, "Policy-based Privacy-Preserving Scheme for Primary Users in Database-driven Cognitive Radio Networks," **2016 IEEE GLOBECOM**, Washington DC, USA
2. **Jianqing Liu**, H. Yue, H. Ding, P. Si, and Y. Fang, "An Energy Efficient Cooperative Strategy for Secondary Users in Cognitive Radio Networks," **2015 IEEE GLOBECOM**, San Diego, USA
3. **Jianqing Liu**, K. Song, T. Pan, J. Zha, Y. Fan, and C. Zhong, "Ultra-Wideband (UWB) Bandpass Filter with Inductance-Loaded Y-Shaped Multiple-Mode Resonator," 2012 IEEE International Workshop on Microwave and Millimeter Wave Circuits and System Technology **(IEEE MMWCST)**, Chengdu, China **(Best Paper Award)**

4. B. Feng, **Jianqing Liu**, C. Zhang, Y. Fang, "Communication through Symbol Silence: Towards Free Control Messages in Indoor WLANs," **2017 IEEE ICDCS**, Atlanta, USA
5. H. Ding, H. Yue, **Jianqing Liu**, P. Si, and Y. Fang, "Energy-Efficient Secondary Traffic Scheduling with MIMO Beamforming," **2015 IEEE GLOBECOM**, San Diego, USA
6. S. Jiang, X. Zhu, L. Guo, **Jianqing Liu**, "Publicly Verifiable Boolean Query Over Outsourced Encrypted Data," **2015 IEEE GLOBECOM**, San Diego, USA
7. J. Zha, Y. L. Luo, P. Liu, **Jianqing Liu**, "A Doherty power amplifier with an improved π-type output network," **2012 IEEE MMWCST**, Chengdu, China
8. J. Zha, Y. Luo, Q. Li, **Jianqing Liu**, "A Novel Power Dependent Input Distribution Network for Doherty Amplifier Efficiency Improvement," **2012 IEEE MMWCST**, Chengdu, China

Teaching Experiences

Teaching Assistant, Department of Electrical and Computer Engineering, University of Florida Aug. 2016-now

- Supervised teaching for undergraduate/graduate joint course Computer Communications (EEL4598/5718) for Fall 2016 and Wireless Networks (EEL6591) for Spring 2017. Giving lectures, grading homework and exams, and hosting office hours to help students on homework and projects.

Teaching Assistant, Department of Electrical and Computer Engineering, Rutgers University Aug. 2013-May 2014

- Instructed undergraduate course Electronic Devices Lab (14:332:363:05) for Fall 2013. Assisted students in learning hands-on transistor circuit designs. Trained them in using PSPICE schematic and analog design environment.
- Teaching Assistant for undergraduate course Electromagnetic Field (14:332:382) for Spring 2014. Instructed the field theory and electromagnetic in recitation class. Conducted office hours to help students with homework problems.

Awards & Honors

Student Travel Grant for IEEE GLOBECOM, National Science Foundation (NSF)	Dec. 2016
Graduate Student Fellowship, UF	Aug. 2014
Best Paper Award in 2012 IEEE International Workshop on MMWCST	Apr. 2012
List of UESTC Top 10 Outstanding Students (top 10 out of 4500 undergraduates at UESTC)	Nov. 2012
Outstanding Graduate Award at Sichuan Province, China	Dec. 2012
Alumni Scholarship, UESTC (top 2 out of 700 undergraduates at ECE Department)	Oct. 2012
Third Prize in National English Contest for College Students, China	May 2012
First Class Scholarship, UESTC	May 2011
First Prize in Mathematical Olympiad at Shandong Province, China	Nov. 2008

Professional Activities

System Administrator, IEEE Transaction on Vehicular Technology Aug. 2014-Present

Journal Reviewer

1. IEEE Transactions on Vehicular Technology **(TVT)**
2. IEEE Transactions on Mobile Computing **(TMC)**
3. IEEE Transactions on Big Data **(TBD)**
4. International Journal of Distributed Sensor Networks **(IJDSN)**
5. Journal of Communications and Information Networks **(JCIN)**
6. Ad hoc & Sensor Wireless Networks

Conference Reviewer

1. 2014 IEEE Wireless Communications and Networking Conference **(WCNC'14)**
2. 2017 International Wireless Communications and Mobile Computing Conference **(IWCMC'17)**