

# Weiwei Jiang

Research keywords: Ubicomp, Wireless communications

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## EDUCATION

**The University of Tokyo - Tokyo, Japan - Doctoral Candidate**  
2017.04 – present Major in Information and Communication Engineering  
**Japan Advanced Institute of Science and Technology – Nomi, Japan - Degree of Master in Information Science**  
2014.10 – 2016.09 Major in Information Science, GPA: 92.54%  
Master Thesis: *Diversity Multiplexing Tradeoff in Opportunistic Relaying with Lossy Forwarding*  
**University of Oulu – Oulu, Finland – Exchange Student**  
2013.09 – 2014.05 Exchange student in Department of Computer Science and Technology  
**Huazhong University of Science and Technology – Wuhan, China – Degree of Bachelor of Engineering**  
2010.09 – 2011.06 Major in Computer Science and Technology  
2011.09 – 2014.06 Major in Internet of Things Engineering, GPA: 87.49%, Top 1 in my major  
Bachelor Thesis: *Collaboration of Ground Robots and UAVs Forming a Sensor Network*

## SKILLS

**Programming**  
Python, C, C++, Java, Matlab, PHP, Functional programming and etc.  
Machine learning, Linux, Android, Embedded system, Win32/64, Qt, TCP/IP etc.

**Prototyping**  
3D printer, Laser cutter, PCB design & milling, laboratory test & characterization, etc.

**Language**  
Chinese (native), English (TOEFL iBT 105), Japanese (JLPT N2)

## RESEARCH EXPERIENCES

**Student researcher (Kawahara ERATO project), Kawahara Laboratory, The University of Tokyo** 2017.01.15 – present  
Working on applying AI on wireless communication technologies.

**Student researcher (EU-FP7 RESCUE Project), Information Theory and Signal Processing Laboratory, Japan Advanced Institute of Science and Technology** 2014.07.24 – 2016.09.23  
Worked on theoretical analyses and optimization for opportunistic lossy-forwarding systems.  
Developed a machine learning method for the system in practical use.

**Exchange student, Center for Ubiquitous Computing, University of Oulu** 2013.09.03 – 2014.05.27  
Developed a ubiquitous communication system by utilizing magnetometer-equipped smart devices.  
Developed a dynamic wireless sensor network system by utilizing quadcopters (drone swarm).

**Research assistant, Wuhan National Laboratory for Optoelectronics, Huazhong University of Science and Technology** 2013.07.06 – 2013.08.10  
Developed a private cloud based on OpenStack to be used for Community Level cloud services.

## AWARDS

2017.07 – 2017.12 Research Assistant for the University of Tokyo Grants for PhD Research  
2016.09 JAIST Outstanding Graduate (Master degree)  
2015.10 – 2016.09 JAIST Scholarship for Master's Program (for Top 10% students)  
2015.04 – 2016.09 TEIJIN Scholarship (only 2 foreign master student recipients in Japan)  
2014.10 – 2015.03 JASSO Scholarship (from Japan Scholarship Foundation)  
2014.06 Excellent Bachelor Thesis Award (2nd place out of around 500 theses)  
2014.06 HUST Outstanding Graduate Award (Bachelor degree)  
2013.09 – 2014.06 National Endeavor Fellowship (from Chinese Government, for Top 3% students)  
2013.05 3rd prize in Lanqiao Cup National Software Competition (sponsored by IBM&Intel)

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PUBLICATIONS

- [1] C. Caffrey, T. Umedachi, **W. Jiang**, T. Sasatani, Y. Narusue, R. Niiyama, & Y. Kawahara. 2018. "Soft Robotic Caterpillar with Wirelessly Powered Shape Memory Alloy Actuators", International Journal of Robotics Research (IJRR), *under review*.
- [2] X. He, **W. Jiang**, X. Zhou, M. Cheng & X. Zheng. 2018. "Outage Probability Analysis of Decode-and-Forward Relaying Systems with Energy Harvesting", 2018 IEEE Wireless Communications and Networking Conference (WCNC), *to appear*.
- [3] **W. Jiang**, X. He, & T. Matsumoto. 2017. "Power Allocation in an Asymmetric Wireless Sensor Network", IEEE Communications Letters 21 (2), 378-381.
- [4] S. Qian, J. He, X. He, **W. Jiang**, M. Juntti & T. Matsumoto. 2016. "Line-of-Sight Component Impact Analyses for Lossy Forward Relaying over Fading Channels Having Different Statistical Properties", 13th IEEE VTS Asia Pacific Wireless Communications Symposium (APWCS 2016).
- [5] **W. Jiang**, X. He, S. Qian, M. Juntti & T. Matsumoto. 2015. "Finite-SNR Diversity-Multiplexing Tradeoff for Decode-and-Forward Relaying System Allowing Intra-link Errors", 10th International Conference on Information, Communications and Signal Processing (ICICS 2015).
- [6] **W. Jiang**, D. Ferreira, J. Ylioja, J. Goncalves & V. Kostakos. 2014. "Pulse: Low Bitrate Wireless Magnetic Communication for Smartphones", Proceedings of the 2014 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp 2014). [Acceptance rate: 16%]