Wenhao Wu

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OBJECTIVE A summer internship in software engineering/wireless communication.

EDUCATION

Ph.D. Candidate in Electrical and Computer Engineering 2012 - 2017 (expected)
University of California, Davis, Davis, CA
Advisor: Prof. Zhi Ding
Cumulative GPA: 3.95
Minor: Mathematics

B.S. in Electrical Engineering 2008 - 2012
Tsinghua University, Beijing, China

TECHNICAL SKILLS

- Java, Python, C/C++, Matlab/GNU Octave, R.
- Experience with HTML, XML, JavaScript, D3 and CSS.
- Basic Linux system administration.

EXPERIENCE

Graduate Student Researcher 04/2015
Advisor: Dr. Xiaoguang "Leo" Liu and Prof. Zhi Ding
- Test the feasibility of the design requirement for the RF Microsystems (TA-1A) in DARPA Near Zero Power RF and Sensor Operations (DARPA-BAA-15-14).

Graduate Student Researcher 09/2014 - present
Advisor: Prof. Zhi Ding and Prof. Hans D. Mittelmann
- Design Modulation Diversity schemes for various wireless channels by solving Quadratic Assignment Problems (QAPs) to reduce bit error rate (BER).

Core Engineer Intern 07/2014 - 09/2014
Range Networks, San Francisco, CA. Supervisor: James Peroulas
- Modified the GMSK modulator of openBTS to reduce the phase error and spectral leakage in multi-carrier configurations. Verified with openBTS dev kit and R&S CMD57 digital radio communication tester.
- Designed the LTE PRACH receiver and the corresponding testbed with Octave according to TS 36.211 v12.2.0 and tested according to TS 36.141 v12.4.0.

Graduate Student Researcher 05/2013 - 09/2014
Advisor: Prof. Zhi Ding and Prof. Chengshan Xiao
- Design linear precoder for various MIMO channels with practical finite-alphabet inputs to improve channel capacity.

Teaching Assistant 01/2013 - 04/2013
EEC 180A Digital Systems, Dept. ECE, UC Davis
- Lab sessions, review sessions and grading.

PUBLICATIONS

[1] W. Wu, H. Mittelmann, and Z. Ding, "Modulation design for two-way amplify-and-forward relay HARQ," submitted for publication.

[2] W. Wu, K. Wang, W. Zeng, Z. Ding, and C. Xiao, "Cooperative multi-cell MIMO downlink precoding with finite-alphabet inputs," *IEEE Trans. Commun.*, vol. 63, no. 3, pp. 766-779, Mar. 2015.

[3] W. Wu, K. Wang, Z. Ding, and C. Xiao, "Cooperative multi-cell MIMO downlink precoding for finite-alphabet inputs," in *IEEE Proc. Int. Conf. Acoust., Speech, Signal Process.*, May 2014, pp. 464-468.

WEBSITES

- LinkedIn: `https://www.linkedin.com/pub/wenhao-wu/4b/249/ab`
- Github: `https://github.com/huragok`

HONORS & AWARDS

Third-class Excellent Social Service Scholarship, Tsinghua University.	10/2011
Honor of Excellent Leader of the Student Association for Science and Technology, Tsinghua University.	04/2011
First-class Outstanding Scholarship (Samsung Scholarship), Tsinghua University/Samsung.	12/2009
Second-class Outstanding Freshman Scholarship, Tsinghua University.	12/2008