

Wenhao Wu

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OBJECTIVE	A full time position in Software Engineering / Wireless Communication / Data Engineering.		
EDUCATION	<i>Ph.D. Candidate in Electrical and Computer Engineering</i>	2012 - 2017 (expected)	
	University of California, Davis, Davis, CA Advisor: Prof. Zhi Ding Cumulative GPA: 3.95 Minor: Mathematics		
	<i>B.S. in Electrical Engineering</i>	2008 - 2012	
	Tsinghua University, Beijing, China		
TECHNICAL SKILLS	<ul style="list-style-type: none">• Java, Python, C/C++, Matlab/GNU Octave, R.• Experience with HTML, XML, JavaScript, D3, CSS and SQL.• Basic Linux system administration.• Wireless Communication, Signal Processing, Statistical Learning.		
EXPERIENCE	<i>Graduate Student Researcher</i>	04/2015	
	Advisor: Dr. Xiaoguang “Leo” Liu and Prof. Zhi Ding		
	<ul style="list-style-type: none">• 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).		
	<i>Core Engineer Intern</i>	07/2014 - 09/2014	
	Range Networks, San Francisco, CA. Supervisor: James Peroulas		
	<ul style="list-style-type: none">• 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.		
	<i>Teaching Assistant</i>	01/2013 - 04/2013	
	EEC 180A Digital Systems, Dept. ECE, UC Davis		
	<ul style="list-style-type: none">• Lab sessions, review sessions and grading.		
PROJECTS	<i>NYC Taxi Data Pickup Prediction</i>	06/2016	
	<ul style="list-style-type: none">• STA 208 (Statistical Methods in Machine Learning) Course Project• https://github.com/huragok/STA208/tree/master/project.		
	<i>Inferring the Night Life Hotspot in NYC from Taxi Trip Data</i>	06/2016	
	<ul style="list-style-type: none">• MAT 280 (Mathematical Foundations for Big Data) Course Project• https://github.com/huragok/MAT280/tree/master/project.		
	<i>A Partial Solution Manual for: The Elements of Statistical Learning</i>	01/2016	

- <https://github.com/huragok/IDA>.

Data Visualization on Community Detection of Facebook Data 06/2015

- STA 242 (Statistical Programming) Course Project.
- <https://github.com/huragok/STA242Project>.

An Introduction to Algebraic Multigrid 06/2013

- MAT 228C (Numerical Solution of Differential Equations) Course Project.
- <https://github.com/huragok/MAT228C>.

Wireless Local Area Network Received Signal Strength Based Indoor Localization And Tracking Algorithms Using Field Data 03/2013

- ECS 257 (Mobile/Wireless Networks) Course Project.
- <https://github.com/huragok/ECS257>.

PUBLICATIONS

- [1] W. Wu, Z. Ding, “On Efficient Packet Switched Wireless Networking: A Markovian Approach to Trans-layer Design and Optimization of ROHC”, submitted for publication.
- [2] W. Wu, H. Mittelmann and Z. Ding, “Modulation Design for MIMO-CoMP HARQ”, *IEEE Commun. Lett.*, to be published.
- [3] W. Wu, H. Mittelmann and Z. Ding, “Modulation Design for Two-Way Amplify-and-Forward Relay HARQ,” *IEEE Wireless Commun. Lett.*, vol. 5, no. 3, pp. 244-247, June 2016.
- [4] W. Wu, H. Mittelmann, and Z. Ding, “Statistical analysis of a posteriori channel and noise distribution based on HARQ feedback, preprint: arXiv:1601.04131v1, 2016.
- [5] 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.
- [6] 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/in/wenhao-wu-0ab2494b>
- 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