## Qingqing Huang

Awards

Xerox-MIT Fellowship

Qingqing Tuang	
Contact	☎ (1) 617-909-3319       ☒ 32D-760, 77 Massachusetts Avenue         @ qqh@mit.edu       Cambridge, MA 02139
Education	Massachusetts Institute of Technology Doctorate (in Electrical Engineering and Computer Science): Jun. 2013 – Aug. 2016 Research interests: statistical learning, machine learning algorithms, high dimensional statistics, optimization algorithms.
	Massachusetts Institute of Technology Master (in Electrical Engineering and Computer Science) Research interests: smart grid technologies, electricity market.  Sep. 2011 – May. 2013
	Hong Kong University of Science and Technology Bachelor of Engineering (in Electrical Engineering) Bachelor of Business Administration (in Economics)  Sep. 2006 – Jul. 2011 Sep. 2006 – Jul. 2011
Research Experience	Graduate Student  Laboratory for Information and Decision Systems, MIT  Sep. 2011 – Present Advisor: Munther Dahleh
	Research Internship May. 2014 – Aug. 2014 May. 2015 – Aug. 2015  Machine Learning Group, Microsoft Research, New England  Advisor: Sham Kakade
	Visiting Researcher Big Data Lab, Baidu, Beijing Dec. 2014 Advisor: Tong Zhang
	Research Assistant Jun. 2009 – Jan. 2011 Wireless Communication Group, ECE, HKUST Advisor: Prof. Vincent K.N. Lau
Extra Curricular Activities	Publication Chair of Graduate Student Association, MIT Jan. 2013 – Dec. 2013 In charge of website maintenance, poster design for publicizing events
	<b>Co-president</b> of <i>Graduate Women in Course 6 (GW6), MIT</i> Jan. 2012 – Dec. 2012 Organized extra curricular activities for graduate women in EECS department of MIT
	<b>Software Engineer Intern</b> at <i>Yunzhou-Tech Company, China</i> Jun. 2011 – Aug. 2011 Worked on navigation algorithm improvements for unmanned surface vehicles
	IT Engineering at Kwong Wah Hospital, Hong Kong Jan. 2011 – May. 2011 Developed a web-based medical image archiving system Student Civic Fellow Program
	<b>Project Assistant</b> at <i>Heep Hong Society, Hong Kong</i> Jun. 2010 – Oct. 2010 Collaborated to develop a computer-based learning package for autistic children

Irwin Mark Jacobs and Joan Klein Jacobs Presidential Fellowship

Silver Medal in the National Physics Olympiad, China

2012

2011

2005

Relevant Courses (graduate level) Applied math: probability theory, stochastic process, convex optimization;

Machine learning: inference algorithms and graphical models, statistical learning, artificial intelligence;

**Signal processing:** discrete-time signal processing, information theory, dynamic systems and control;

**Economics:** game theory, micro/macro economics theory, bargaining and auctions.

Teaching Experience Teaching assistant of "6.UAR Prep for Undergrad Research"

Undergraduate level class at MIT Sep. 2015 – Dec. 2015

Instructor: Prof. Anantha Chandrakasan

Teaching assistant of "6.207 Networks"

Undergraduate level class at MIT Jan. 2014 – May. 2014

Instructor: Prof. Munther Dahleh and Prof. Asuman Ozdaglar

**Teaching assistant** of "6.438 Algorithms for Inference"

Graduate level class at MIT Sep. 2013 – Dec. 2013

Instructor: Prof. Devavrat Shah

Academic Publications (in reverse chronological order) "Super-Resolution off the Grid" (co-authored with Sham Kakade, to appear in Annual Conference on Neural Information Processing Systems (NIPS), 2015.)

"A Greedy Algorithm for Nonnegative Matrix and Tensor Factorization" (co-authored with Tong Zhang, working paper.)

"Dynamic Fault Diagnosis in Power Grids Using Hidden Markov Models" (co-authored with Na Li, to appear in IEEE Transactions on Power System, 2015.)

"Learning Mixtures of Gaussians in High Dimensions" (co-authored with Rong Ge and Sham Kakade, appeared in Symposium of Theory of Computing (STOC), 2015.)

"Minimal Realization Problems for Hidden Markov Models" (co-authored with Rong Ge, Sham Kakade, and Munther Dahleh, appeared in IEEE Allerton Conference, 2014.) (journal version submitted IEEE Transactions on Signal Processing, under peer review.)

"H<sub>2</sub>-Based Network Volatility Measures" (co-authored with Ye Yuan, Jorge Goncalves, and Munther Dahleh, appeared in IEEE American Control Conference (ACC), 2014.)

"Efficiency-Risk Tradeoffs in Electricity Markets with Dynamic Demand Response" (coauthored with Mardavij Roozbehani and Munther A Dahleh, appeared in IEEE Transactions on Smart Grid, 2014.)

"Efficiency-Risk Tradeoffs in Dynamic Oligopoly Markets - with application to electricity markets" (co-authored with Mardavij Roozbehani and Munther A Dahleh, appeared in IEEE Conference on Decision and Control (CDC), 2012.)

"Queue-Aware Dynamic Clustering and Power Allocation for Network MIMO Systems via Distributive Stochastic Learning" (co-authored with Ying Cui and Vincent Lau, appeared in IEEE Transactions on Signal Processing, 2010.)

"Delay-Optimal Orthogonal Beam forming and Power Control for MIMO system with Reduced CSI Feedback" (Technical Report, HKUST, 2010.)