

# Hongyao Ma

---

CONTACT	33 Oxford Street, Maxwell Dworkin 242 Cambridge, MA, 02138	hongyaoma@seas.harvard.edu <a href="http://scholar.harvard.edu/hma">http://scholar.harvard.edu/hma</a>
EDUCATION	<b>Harvard University</b> , Cambridge, MA, U.S. Ph.D., Computer Science, Advisor: David C. Parkes M.S., Electrical Engineering, 2014	2012 - present
	<b>Xi'an Jiaotong University</b> , Xi'an, Shaanxi, China B.S., Electrical Engineering, 2012, with highest honor The Special Class for the Gifted Young of China in XJTU, 2006 - 2008	2006 - 2012
EXPERIENCES	<b>Research Assistant</b> , the EconCS Group, Harvard University.	2014 - present
	<b>Visitor</b> , Technion- Israel Institute of Technology. Host: Reshef Meir	Aug. 2016
	<b>Research Assistant</b> , Harvard University. Supervisor: Vahid Tarokh Project: Phase Retrieval for Sparse Signal Recovery in Stellar Interferometry	2013 - 2014
	<b>Research Intern</b> , AT&T Labs Research, NJ Mentors: Vaneet Aggarwal, Walter Willinger and Ajay Mahimkar Project: Matrix and Tensor Completion for Inferring Cellular Service Quality	Summer 2013
	<b>Visiting Student</b> The CSST Program, UCLA, CA. Mentor: Daniel B. Ennis Project: Fourier Analysis of Stimulated Echoes for Left Ventricular Torsion	Summer 2011
PUBLICATIONS	<b>Generalizing Demand Response Through Reward Bidding.</b> Hongyao Ma, David C. Parkes and Valentin Robu. To appear in the Proceedings of the 16th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'17), 2017.	
	<b>Incentivizing Reliability in Demand-Side Response.</b> H. Ma, Valentin Robu, Na Li and David C. Parkes. In the Proceedings of the 25th International Joint Conference on Artificial Intelligence (IJCAI'16), 2016.	
	<b>Social Choice for General Utilities.</b> H. Ma, Reshef Meir and David C. Parkes. In the Proceedings of the 25th International Joint Conference on Artificial Intelligence (IJCAI'16), 2016.	
	<b>Inferring Smartphone Service Quality using Tensor Methods.</b> Vaneet Aggarwal, Ajay A Mahimkar, H. Ma, Zemin Zhang, Shuchin Aeron, and Walter Willinger. In the Proceedings of the 12th International Conference on Network and Service Management (CNSM'16), 2016.	
WORKING PAPERS	<b>Spatio-Temporal Pricing for Ride Sharing.</b>	2017
	Fei Fang, Hongyao Ma, and David C. Parkes.	
	<b>Improving Future Coordination using Contingent-Payment Mechanisms.</b>	2016
	Hongyao Ma, Reshef Meir, David C. Parkes and James Zou. arXiv:1607.06511.	
	<b>Social Choice with Non-quasi-linear Utilities.</b>	2016
	Hongyao Ma, Reshef Meir, David C. Parkes.	
TALKS AND PRESENTATIONS	Special seminar, Faculty of Industrial Engineering and Management, Technion, Israel	2016
	The Women in Theory Workshop, Simons Institute, Berkeley	2016
	The 3rd Conference on Auctions, Market Mechanisms and Their Applications, Chicago	2015
	Poster presentations: SIGAI CNC'16, ACM EC'16, NYCE 2016	2016
PATENT	Method and apparatus for determining localized service quality in a wireless network. Ajay Mahimkar, Vaneet Aggarwal, Hongyao Ma, and Walter Willinger. U.S. Patent 9,294,366[P]. 2016-3-22.	

TEACHING	<b>Teaching Fellow</b> , Harvard University	
	CS186 Economics and Computation	Spring 2015
	SPU27 Science and Cooking, From Haute Cuisine to Soft Matter Science	Fall 2014
	ES156 Signals and Systems	Spring 2014
SELECTED COURSEWORK	<b>MIT</b> Applied Econometrics, Contract Theory, Market Design, Microeconomics, Advanced Stochastic Processes, Information Theory, Fundamentals of Probability, Principles of Digital Communications	
	<b>Harvard</b> Advanced Algorithms, Advanced Algebra, Big Data Systems, Computer Vision, Incentives and Information in Social Networks, Statistical Inference, Analysis II	
HONORS AND AWARDS	Certificate of Distinction in Teaching, Harvard University	2014
	Outstanding Graduate (10/16,000), Xi'an Jiaotong University	2012
	UCLA-CSST Program Scholarship, UCLA	2011
ADVISING AND SERVICE	Supervising senior thesis in Math and Computer Science, Harvard College. Lisa Wang, Fall '15 - Spring '16; Jimmy Jiang: Fall '16 - present	
	PC member: EC'16; AMEC/TADA'17; Conference reviewing: IJCAI'16, EC'15, IJCAI'15, AAMAS'15, ADT'15	
	Rapporteur for the Defining Fairness Workshop— Sociotechnical Algorithms and Systems of the Future, Harvard University	2016
	Grad Student Mentor, SEAS Connect Program, GSAS Host Student Program	2013 - 2016
	Admission Committee, the Special Class of the Gifted Young in XJTU	2009 - 2012