# Ming Yin

Microsoft Research NYC Contact Phone: (+1) 617-216-8924 641 Avenue of the Americas, 7th Floor Information Email: Ming.Yin@microsoft.com New York, NY 10011, USA http://www.mingyin.org Research Social computing, human computation and crowdsourcing, computational social sci-Interests ence, applied artificial intelligence and machine learning, human-computer interaction, behavior economics. EDUCATION Harvard University, Cambridge, MA, USA Sep 2011 – Jun 2017 Ph.D. in Computer Science Master of Science in Computer Science Advisor: Yiling Chen City University of Hong Kong, Hong Kong, China Aug 2009 - Dec 2009 Undergraduate Exchange Student in Computer Science Tsinghua University, Beijing, China Aug 2007 – Jul 2011 Bachelor of Engineering in Computer Software APPOINTMENTS Postdoctoral Researcher Aug 2017 – Jun 2018 Microsoft Research, Computational Social Science Group, New York, NY Research Intern Aug 2016 - Oct 2016 Microsoft Research, Social Media Collective, Cambridge, MA Mentor: Mary L. Gray Research Intern Jun 2015 – Aug 2015 Microsoft Research, Computational Social Science Group, New York, NY Mentor: Siddharth Suri and Jennifer Wortman Vaughan Research Intern Jun 2014 – Aug 2014 PARC, Collective Intelligence and Service Computing Group, Webster, NY Mentor: Yu-An Sun Research Intern Jun 2013 – Aug 2013 Xerox Research, Social and Web Technology Group, Webster, NY Mentor: Yu-An Sun Mar 2011 - Jul 2011 Research Intern Baidu Inc., Ads Research Team, Beijing, China Mentor: Yunhong Zhou Honors and Class of 2017 Siebel Scholar, the Siebel Foundation AWARDS Chinese Government Award for Outstanding Students Abroad 2016 Best Paper Honorable Mention, CHI 2016 NSF Student Travel Award, AAMAS 2015 Certificate of Distinction in Teaching, Harvard University 2013 Graduate Student Fellowship, Harvard University 2011 Beijing Outstanding Graduate, Beijing Municipal Commission of Education 2011 Tsinghua University Outstanding Graduate, Tsinghua University 2011

#### Publications

#### Conference Papers

Ming Yin, Siddharth Suri, Mary Gray. Running Out of Time: The Impact and Value of Flexibility in On-Demand Crowdwork. In *Proc. of the 36th ACM Conference on Human Factors in Computing Systems (CHI)*, Montreal, Canada, April 2018.

Ming Yin, Yiling Chen. Predicting Crowd Work Quality under Monetary Interventions. In *Proc. of the 4th AAAI Conference on Human Computation and Crowdsourcing (HCOMP)*, Austin, TX, October 30 – November 3, 2016.

Edith Law, Ming Yin, Joslin Goh, Kevin Chen, Michael Terry, Krzysztof Z. Gajos. Curiosity Killed the Cat, but Makes Crowdwork Better. In *Proc. of the 34th ACM Conference on Human Factors in Computing Systems (CHI)*, San Jose, CA, May 2016. (Best Paper Honorable Mention)

Ming Yin, Mary Gray, Siddharth Suri, Jennifer Wortman Vaughan. The Communication Network Within the Crowd. In *Proc. of the 25th International World Wide Web Conference (WWW)*, Montreal, Canada, April 2016.

Ming Yin, Yiling Chen. Bonus or Not? Learn to Reward in Crowdsourcing. In *Proc.* of the 24th International Joint Conference on Artificial Intelligence (IJCAI), Buenos Aires, Argentina, July 2015.

Ming Yin, Yu-An Sun. Human Behavior Models for Virtual Agents in Repeated Decision Making under Uncertainty. In *Proc. of the 14th International Conference on Autonomous Agents & Multiagent Systems (AAMAS)*, Istanbul, Turkey, May 2015.

Ming Yin, Yiling Chen, Yu-An Sun. Monetary Interventions in Crowdsourcing Task Switching. In *Proc. of the 2nd AAAI Conference on Human Computation and Crowdsourcing (HCOMP)*, Pittsburgh, PA, November 2014.

Ming Yin, Yiling Chen, Yu-An Sun. The Effects of Performance-Contingent Financial Incentives in Online Labor Markets. In *Proc. of the 27th Conference on Artificial Intelligence (AAAI)*, Bellevue, WA, July 2013.

Yang Sun, Yunhong Zhou, Ming Yin, Xiaotie Deng. On the Convergence and Robustness of Reserve Pricing in Keyword Auctions. In *Proc. of the 14th International Conference on Electronic Commerce (ICEC)*, Singapore, August 2012.

Ming Yin, Peibei Shi, Wangshu Zhang, Rui Jiang. Optimizing subnetwork markers for the classification of breast cancer metastases: A simulated annealing strategy. In *Proc. of 2011 International Conference on Medical Information and Bioengineering (ICMIB)*, Chengdu, China, January 2011.

Xiaotie Deng, Yang Sun, Ming Yin, Yunhong Zhou. Mechanism design for multi-slot ads auction in sponsored search markets. In *Proc. of the 4th International Frontiers in Algorithmics Workshop (FAW)*, Wuhan, China, August 2010.

# Posters and Extended Abstracts

Ming Yin, Siddharth Suri, Mary L. Gray. The Impact and Value of Flexibility in

On-Demand Work. In the 2017 Conference on Digital Experimentation (CODE), Cambridge, MA, October 2017.

Edith Law, Ming Yin, Joslin Goh, Kevin Chen, Michael Terry, Krzysztof Z. Gajos. Curiosity Killed the Cat, but Makes Crowdwork Better. In the 2016 Conference on Digital Experimentation (CODE), Cambridge, MA, October 2016.

Mary Gray, Siddharth Suri, Ming Yin, Jennifer Wortman Vaughan, Syed Shoaib Ali, Deepti Kulkarni. The Collaboration and Communication Networks within the Crowd. In the 2016 International Conference on Computational Social Science (IC2S2), Evanston, IL, June 2016.

Ming Yin, Yiling Chen, Yu-An Sun. Task Sequence Design: Evidence on Price and Difficulty. In the 1st AAAI Conference on Human Computation and Crowdsourcing (HCOMP), Palm Springs, CA, November 2013. (Work in progress track)

#### Other Publications

Ming Yin. Peeking into the On-Demand Economy: Crowd Behavior and Incentive Design. Ph.D. Dissertation, School of Engineering and Applied Sciences, Harvard University, June 2017.

#### Patents

Method and Apparatus for Recommending a Selection between a Reseller and a Multisided Platform, with Yu-An Sun, US Patent Application Number 14/161393.

#### TEACHING

## Guest Lecturer, Harvard University

Spring 2015, Spring 2017

• CS 280r (Advanced Topics in Artificial Intelligence)

## Teaching Fellow, Harvard University

Fall 2013, Fall 2014

• CS182 (Intelligent Machines: Reasoning, Actions and Plans)

## Teaching Fellow, Harvard University

Spring 2013

• AM121 (Introduction to Optimization: Models and Methods)

# SELECTED INVITED TALKS

### Peeking into the On-Demand Economy.

Data Science Seminar, University of Massachusetts. Amherst, MA.	$Mar\ 2017$
Computer Science Department, Boston College. Chestnut Hill, MA.	$Mar\ 2017$
Simon Fraser University. Burnaby, BC, Canada.	$Mar\ 2017$
Information Science Colloquium, Cornell University. Ithaca, NY.	Feb $2017$
Microsoft Research. New York, NY.	Feb $2017$
Department of Computer Science, Purdue University. West Lafayette, IN.	Feb $2017$
University of Waterloo, Waterloo, ON, Canada.	Feb 2017

### Designing Incentives for Humans in the Loop.

Image and Video Computing Seminar, Boston University. Boston, MA. Nov 2016

SERVICE

# LEADERSHIP AND Program Committees

International World Wide Web Conference (WWW), 2018

The Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD), 2018, 2017

The Second Workshop on Human Computation for Image and Video Analysis (Group-Sight@HCOMP), 2017

# Conference/Workshop Organizing Committees

The 6th AAAI Conference on Human Computation and Crowdsourcing, HCOMP 2018, CrowdCamp Co-chair

The 5th AAAI Conference on Human Computation and Crowdsourcing, HCOMP 2017, Website Co-chair

Designing for Curiosity: an Interdisciplinary Workshop, CHI 2017, Co-organizer

# Conference Refereeing

ACM Conference on Human Factors in Computing Systems (CHI), 2018, 2017, 2014

ACM Conference on Economics and Computation (EC), 2016

ACM Conference on Computer-Supported Cooperative Work (CSCW), 2015

The Conference on Web and Internet Economics (WINE), 2012

International World Wide Web Conference (WWW), 2011

The International Colloquium on Automata, Languages and Programming (ICALP),  $2010\,$ 

## Journal Refereeing

Journal of Artificial Intelligence Research (JAIR), Science Advances, ACM Transactions on Intelligent Systems and Technology (TIST)

2013 - 2014

## Student Organizer

Harvard EconCS Seminar

#### Graduate Student Mentor

SEAS Connect Program, Harvard University	2013 - 2014
GSAS Host Student Program, Harvard University	2012 - 2013

## President

Student Association of Science and Technology (SAST), School of Software, Tsinghua University 2010-2011