# Ming Yin

CONTACT INFORMATION	Lawson Computer Science Building 2142B 305 N. University Street West Lafayette, IN 47907, USA	Phone: (+1)765-496-9381 Email: mingyin@purdue.edu http://www.mingyin.org
RESEARCH INTERESTS	Social computing, human computation and crowdsourcing, computational social science, human-computer interaction, applied artificial intelligence and machine learning, behavior economics.	
EDUCATION	Harvard University, Cambridge, MA, USA  Sep 2011 – Jun 20  Ph.D. in Computer Science  Thesis Title: Peeking into the On-Demand Economy: Crowd Behavior and Incent Design (Nominated for ACM Doctoral Dissertation Award)	
	City University of Hong Kong, Hong Kong, Chi Undergraduate Exchange Student in Computer Scien	
	<b>Tsinghua University</b> , Beijing, China Bachelor of Engineering in Computer Software	Aug 2007 – Jul 2011
APPOINTMENTS	MENTS Assistant Professor  Purdue University, Department of Computer Science, West Lafayette, IN	
	Postdoctoral Researcher  Microsoft Research, Computational Social Science G	Aug 2017 – Jun 2018 roup, New York, NY
	Research Intern  Microsoft Research, Social Media Collective, Cambridge, MA  Aug 2016 – Oct 2016	
	Research Intern  Microsoft Research, Computational Social Science Group, New York  Research Intern  PARC, Collective Intelligence and Service Computing Group, Webst	
	Research Intern  Xerox Research, Social and Web Technology Group,	Jun 2013 – Aug 2013 Webster, NY
	Research Intern Baidu Inc., Ads Research Team, Beijing, China	Mar 2011 – Jul 2011
Honors and Awards	ACM Doctoral Dissertation Award Nomination Siebel Scholar, the Siebel Foundation Chinese Government Award for Outstanding Studen Best Paper Honorable Mention, CHI NSF Student Travel Award, AAMAS Certificate of Distinction in Teaching, Harvard University Graduate Student Fellowship, Harvard University Beijing Outstanding Graduate, Beijing Municipal Co Tsinghua University Outstanding Graduate, Tsinghu	2016 2015 ersity 2013 2011 commission of Education 2011

### **Publications**

In most cases, my collaborators and I choose to have students as first authors and then determine the authorship alphabetically.

### Refereed Conference Publications

Wei Tang, Chien-Ju Ho, Ming Yin. Leverage Peer Communication to Enhance Crowdsourcing. In *Proc. of the Web Conference (WWW)*, San Francisco, CA, May 2019.

Ming Yin, Jennifer Wortman Vaughan, Hanna Wallach. Understanding the Effect of Accuracy on Trust in Machine Learning Models. In *Proc. of the 37th ACM Conference on Human Factors in Computing Systems (CHI)*, Glasgow, UK, May 2019.

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.

## Workshop Papers, Posters and Extended Abstracts

Ming Yin, Emma Heikensten, Yiling Chen. Is Time Our Friend or Enemy? The Impact of Timing on Online Experimentation. In the 2018 Conference on Digital Experimentation (CODE), Cambridge, MA, October 2018.

Ming Yin, Jennifer Wortman Vaughan, Hanna Wallach. Does Stated Accuracy Affect Trust in Machine Learning Algorithms? In the 3rd ICML Workshop on Human Interpretability in Machine Learning (WHI), Stockholm, Sweden, July 2018.

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 Conferece 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

# Instructor, Purdue University

• CS 573 (Data Mining)

Spring 2019

• CS 590 – CSC (Crowdsourcing and Social Computing)

Fall 2018

# Guest Lecturer, Harvard University

• CS 280r (Advanced Topics in Artificial Intelligence)

Spring 2015, Spring 2017

### **Teaching Fellow**, Harvard University

- CS 182 (Intelligent Machines: Reasoning, Actions and Plans) Fall 2013, Fall 2014
- AM 121 (Introduction to Optimization: Models and Methods) Spring 2013

#### SELECTED Peeking into the On-Demand Economy.

INVITED TALKS Nov 2018 Yale Marketing Seminar, Yale University. New Haven, CT. ACM New York City Meetup. New York, NY. Jun 2018 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 Feb 2017

Department of Computer Science, Purdue University. West Lafayette, IN.

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

Media Coverage The shape of work to come, Nature News Feature.

Oct 2017

# LEADERSHIP AND Program Committees

SERVICE

Conference on Artificial Intelligence (AAAI), 2019

International Joint Conference on Artificial Intelligence (IJCAI), 2019

The Web Conference (WWW), 2018 – 2019

ACM Conference on Economics and Computation (EC), 2019

IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), 2019

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

The Workshop on Human Computation for Image and Video Analysis (GroupSight@HCOMP), 2017

# Conference/Workshop Organizing Committees

The 7th AAAI Conference on Human Computation and Crowdsourcing, HCOMP 2019, Doctoral Symposium Co-chair

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), 2014, 2017 – 2019

ACM Conference on Computer-Supported Cooperative Work (CSCW), 2015, 2018

ACM Conference on Economics and Computation (EC), 2016

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 Social Computing (TSC), ACM Transactions on Intelligent Systems and Technology (TIST)

Student Organizer	
Harvard EconCS Seminar	2013 - 2014
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