

## Chicheng Zhang

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### CURRENT POSITION

Postdoctoral Researcher  
Microsoft Research New York City  
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### EDUCATION

*PhD*, Computer Science  
UC San Diego, La Jolla, CA, 2012.9-2017.9  
Advisor: Kamalika Chaudhuri  
Thesis: Active learning and confidence-rated prediction

*Master of Science*, Computer Science  
UC San Diego, La Jolla, CA, 2012.9-2015.6

*Bachelor of Science*, Machine Intelligence, School of EECS  
Peking University, Beijing, China, 2008.9-2012.7

*Second Degree Certificate*, Mathematics and Applied Mathematics  
Peking University, Beijing, China, 2008.9-2012.7

### PUBLICATIONS (\* indicates a paper with alphabetically-ordered authors)

Chicheng Zhang, Efficient active learning of sparse halfspaces. COLT 2018.

\*Songbai Yan and Chicheng Zhang, Revisiting Perceptron: efficient and label-optimal active learning of halfspaces. NIPS 2017.

\*Alina Beygelzimer, Francesco Orabona and Chicheng Zhang, Efficient online bandit multiclass learning with  $\tilde{O}(\sqrt{T})$  regret. ICML 2017.

\*Alina Beygelzimer, Daniel Hsu, John Langford and Chicheng Zhang, Search improves label for active learning. NIPS 2016.

Chicheng Zhang and Kamalika Chaudhuri, The extended Littlestone's dimension for learning with mistakes and abstentions. COLT 2016.

Chicheng Zhang and Kamalika Chaudhuri, Active learning from weak and strong labelers. NIPS 2015.

Chicheng Zhang, Jimin Song, Kevin C. Chen and Kamalika Chaudhuri, Spectral learning of large structured HMMs for comparative epigenomics. NIPS 2015.

Chicheng Zhang and Kamalika Chaudhuri, Beyond disagreement-based agnostic active learning. NIPS 2014.

### PREPRINTS

\*Alina Beygelzimer, Dávid Pál, Balázs Szörényi, Devanathan Thiruvengadachari, Chen-Yu Wei and Chicheng Zhang. Bandit multiclass linear classification: efficient algorithms for the separable case. arXiv:1902.02244. 2019.

\*Akshay Krishnamurthy, John Langford, Aleksandrs Slivkins, and Chicheng Zhang. Contextual Bandits with continuous actions: smoothing, zooming, and adapting.

arXiv:1902.01520. 2019.

Chicheng Zhang, Alekh Agarwal, Hal Daumé III, John Langford and Sahand N. Negahban, Warm-starting contextual bandits: robustly combining supervised and bandit feedback. arXiv: 1901.00301. 2019.

Chicheng Zhang, Eran A. Mukamel and Kamalika Chaudhuri, Spectral learning of binomial HMMs for DNA methylation data. arXiv:1802.02498. 2018.

## WORKSHOP CONTRIBUTIONS

Chicheng Zhang and Kamalika Chaudhuri, A potential-based framework for online learning with mistakes and abstentions. NIPS 2016 Workshop on Reliable Machine Learning in the Wild.

Alina Beygelzimer, Daniel Hsu, John Langford and Chicheng Zhang, Search improves label for active learning. ICML 2016 Workshop on Data Efficient Machine Learning.

Chicheng Zhang and Kamalika Chaudhuri, Active learning with weak and strong labelers. ICML 2015 Active Learning Workshop.

Kamalika Chaudhuri and Chicheng Zhang, Improved algorithms for confidence-rated prediction with error guarantees. NIPS 2013 Workshop on Learning Faster from Easy Data.

## EXPERIENCE

*Research Assistant* 2012.9-2017.8  
Computer Science and Engineering Department, UC San Diego  
Supervisor: Prof. Kamalika Chaudhuri

*Undergraduate Research Assistant* 2010.6-2012.6  
Department of Machine Intelligence, Peking University  
Supervisor: Prof. Liwei Wang

*Research Intern* 2016.6-2016.9  
Yahoo! Research, New York  
Supervisor: Dr. Alina Beygelzimer and Dr. Francesco Orabona

*Research Intern* 2015.6-2015.9  
Yahoo! Labs, New York  
Supervisor: Dr. Alina Beygelzimer

*Software Testing Intern* 2011.7-2011.8  
MicroVu Co. China

## SELECTED TALKS

**Interactive Learning with Data-efficiency and Robustness Guarantees**  
Peking University EECS Youth Forum December 2018  
Microsoft Research Asia, Beijing January 2019  
Baidu Research, Beijing January 2019

**Efficient Online Bandit Multiclass Learning with  $\tilde{O}(\sqrt{T})$  Regret**  
ICML 2017, Sydney August 2017  
International Chinese Statistical Association Statistics Symposium June 2018

**Computationally and Statistically Efficient Active Learning of Linear Separators**  
New York University, Machine Learning PhD Seminar March 2018

**Tutorial on Statistical Foundations of Interactive Learning** June 2017  
ISIT 2017, Aachen (co-presented with Kamalika Chaudhuri and Tara Javidi)

**New Directions in Active Learning**  
Microsoft Research, New York March 2017  
Google Research, New York March 2017

**Confidence-based Active Learning**  
Yahoo! Research, New York February 2017  
UCSD Computational Statistics and Machine Learning Seminar May 2015

**The Extended Littlestone's Dimension for Learning with Mistakes and Abstentions**  
COLT 2016, New York June 2016

## TEACHING

**Teaching Assistant:**  
CSE 151 – Introduction to Machine Learning, Spring 2015/Winter 2017, UCSD.  
CSE 202 – Graduate Algorithms, Spring 2016, UCSD.  
CSE 250C – Machine Learning Theory, Spring 2017, UCSD.

## HONORS AND AWARDS

4th place in ACM Southern California Regional Programming Contest	2015
8th place in ACM Southern California Regional Programming Contest	2013
2nd place in UCSD Programming Contest	2013
Li Huirong Scholarship	2011
3rd Prize in Beijing Collegiate Mathematical Contest	2011
Starlight International Media Scholarship	2010
Merit Student Award	2009
3rd Prize in National Mathematics Olympiad in Province	2007

## SERVICES

**Co-organizer:** ICML 2017 Workshop on Picky Learners: Choosing Alternative Ways to Process Data (with Kamalika Chaudhuri, Corinna Cortes, Giulia DeSalvo, Mehryar Mohri and Ningshan Zhang).

**Program Committee:** AISTATS 2019.

**Conference Reviewer:** UAI 2015-2016, NIPS 2015-2018, AISTATS 2016-2018, ICML 2016-2019, ICLR 2018, COLT 2014-2018, ALT 2015, AAAI 2019.

**Journal Reviewer:** IEEE TPAMI, IEEE Transactions on Information Theory, JAIR, JACM, JMLR, TCS.

## SKILLS

C/C++, Java, Python, Matlab, Assembly, SQL.