### Chicheng Zhang

**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**

Chicheng Zhang, Alekh Agarwal, Hal Daumé III, John Langford and Sahand N. Negahban, Warm contextual bandits. Submitted.

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

### WORKING **PAPERS**

\*Alina Beygelzimer, Dávid Pál, Balázs Szörényi, Devanathan Thiruvenkatachari, Chen-Yu Wei and Chicheng Zhang. Efficient online bandit multiclass learning in the realizable setting. 2018.

\*Akshay Krishnamurthy, John Langford, Aleksandrs Slivkins, Wen Sun and Chicheng Zhang. Contextual continuum-armed bandits with policy classes. 2018.

### WORKSHOP CONTRIBU-**TIONS**

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

2011.7-2011.8 Software Testing Intern

MicroVu Co. China

### SELECTED **TALKS**

## Efficient Online Bandit Multiclass Learning with $\tilde{O}(\sqrt{T})$ Regret

ICML 2017, Sydney August 2017 June 2018

International Chinese Statisticial Association Statistics Symposium

## Computationally and Statistically Efficient Active Learning of Linear Sep-

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 March 2017 Google Research, New York

### Confidence-based Active Learning

Yahoo! Research, New York

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 Olypiad 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 2016-2018, 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.