

## Jianbo Chen (陈建波)

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### CONTACT INFORMATION

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### EDUCATION

#### **University of California, Berkeley, California, USA**

Ph.D., Statistics, August, 2015–Present  
Advisor : Michael I. Jordan  
GPA : 3.98/4.0

#### **The University of Hong Kong, Hong Kong**

B.A., Mathematics, September, 2012–June, 2015  
CGPA : 4.17/4.3 Major GPA : 4.27/4.3  
Honor Class : First Class Honor

#### **University of California, Berkeley, California, USA**

Exchange, Mathematics, September–December, 2013  
CGPA : 4.0/4.0 Major GPA : 4.0/4.0

### RESEARCH EXPERIENCE

#### **12/17–5/18 Model Interpretation**

Advisors : L. Song, Ant Financial; M. Wainwright and M. Jordan, UC Berkeley.

- Proposed a novel framework for model interpretation.
- Designed scalable algorithms for interpreting models in language, vision, and social networks.

#### **5/17–9/17 Language-based Image Editing**

Advisors : Yelong Shen and Jianfeng Gao, Microsoft Research.

- Proposed the task of language-based image editing.
- Proposed a model for the task that captures visual and language reasoning.
- Applied the algorithm to language-based image colorization and segmentation.

#### **3/17–9/17 False Discovery Rate Control on Directed Acyclic Graphs**

Advisors : Martin Wainwright and Michael Jordan, EECS, UC Berkeley.

- Proposed an algorithm that controls FDR on directed acyclic graphs.
- Outperformed other algorithms on Gene data.

#### **1/17–5/17 Decentralized Multiple Testing with FDR control**

Advisors : Martin Wainwright and Michael Jordan, EECS, UC Berkeley.

- Proposed a novel setting for decision making on undirected graphs.
- Proposed a family of Query-Test-Exchange algorithms that control FDR.

#### **2/17–6/17 Stochastically Controlled Stochastic Gradient Methods**

Advisor : Michael I. Jordan, EECS, UC Berkeley.

- Proposed a variance reduction method for stochastic gradient methods.
- Outperformed ordinary stochastic gradient methods on neural network models.

#### **5/16–9/16 Kernel Feature Selection in High Dimensions**

Advisors : Martin Wainwright and Michael Jordan, EECS, UC Berkeley.

- Proposed a kernelized method for feature selection.
- Achieved state-of-the-art performance on text data and medical data.

WORKING  
EXPERIENCE

**5/18–8/18 Quantitative Researcher**

Citadel Securities, Chicago, IL.

**12/17–1/18 Research-based Software Engineer**

Ant Financial, Hang Zhou, China.

**9/17–12/17 GSI for CS 189/289A Introduction to Machine Learning**

UC Berkeley, Berkeley, CA.

**5/17–8/17 Research Intern**

Microsoft Research, Redmond, WA

TECHNICAL  
SKILLS

- Extensive experience with Python and TensorFlow.
- Intermediate experience with R.

SELECTED  
HONORS

**Mar. 2015, the Citadel Fellowship**, at UC Berkeley

— Presented to an exceptional PhD graduate student in Statistics.

**Mar. 2015, the Berkeley Fellowship for Graduate Study**, at UC Berkeley

— Presented only to Berkeley's top admitted doctoral students for two years of study.

**Aug. 2015, Ho Sin Hang Prize in Science**, at the University of Hong Kong

— Presented to the best third year B.Sc. student in physical sciences.

**Aug. 2014, B.Sc. Class of 1971 Prize**, at the University of Hong Kong

— Presented to the best second year B.Sc. student in physical sciences.

**Aug. 2013, Ho Fook Prize**, at the University of Hong Kong

— Presented to the best first year B.Sc. student.

PUBLICATIONS

Aaditya Ramdas, Jianbo Chen, Martin J Wainwright, and Michael I Jordan. Dagger : A sequential algorithm for fdr control on dags. *Biometrika*, 2018

Jianbo Chen, Le Song, Martin J Wainwright, and Michael I Jordan. Learning to explain : An information-theoretic perspective on model interpretation. In *35th International Conference on Machine Learning (ICML)*, 2018 (**20-min Oral**)

Jianbo Chen, Yelong Shen, Jianfeng Gao, Jingjing Liu, and Xiaodong Liu. Attention based segmentation from natural language expressions. *Computer Vision and Pattern Recognition (CVPR)*, 2018 (**Spotlight**)

Jianbo Chen, Mitchell Stern, Martin J Wainwright, and Michael I Jordan. Kernel feature selection via conditional covariance minimization. In *Advances in neural information processing systems (NIPS)*, 2017

Lihua Lei, Cheng Ju, Jianbo Chen, and Michael I Jordan. Nonconvex finite-sum optimization via scsg methods. In *Advances in neural information processing systems (NIPS)*, 2017

Aaditya Ramdas, Jianbo Chen, Martin J. Wainwright, and Michael I. Jordan. Asynchronous, robust, decentralized fdr control on undirected sensor networks. In *IEEE Conference on Decision and Control (CDC)*, 2017

PROFESSIONAL  
ACTIVITIES

Spotlight Talk on **Language-based Image Editing**.  
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), June 2018.

Poster on **Language-based Image Editing**.  
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), June 2018.

Poster on **Kernel Feature Selection via Conditional Covariance Minimization**.  
31st Neural Information Processing Systems (NIPS), December 2017.

Poster on **Nonconvex Finite-Sum Optimization Via SCSG Methods**.  
31st Neural Information Processing Systems (NIPS), December 2017.

Talk on **FDR control on directed acyclic graphs**.  
10th International Conference on Multiple Comparison Procedures, June 2017.

Poster on **Decentralized decision making on networks with FDR control**.  
10th International Conference on Multiple Comparison Procedures, June 2017.