

August 6, 2019

## CURRICULUM VITAE

**Jingshu Wang**

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### EDUCATION

2016                      **Ph.D.**, Statistics, Stanford University  
                                 Advisor: Art B. Owen  
                                 Thesis: Factor analysis for high-dimensional data

2011                      **B.Sc.**, Mathematics and Applied Mathematics, Peking University, China

### WORK EXPERIENCE

2019-Current            Assistant Professor  
                                 Department of Statistics, The University of Chicago

2016-2019                Postdoctoral Fellow in Statistics  
                                 Statistics Department, The Wharton School, University of Pennsylvania  
                                 Mentor: Nancy R. Zhang

2013 (June-August)     Summer Graduate Intern  
                                 Quantitative Marketing, Google

### PROFESSIONAL SERVICE

2016-present            Referee for  
                                 *Journal of the American Statistical Association, Biometrika,*  
                                 *Journal of Machine Learning Research, Statistica Sinica,*  
                                 *Journal of Computational and Graphical Statistics, Biometrics,*  
                                 *Statistics and Probability Letters, Genetics, Annals of Statistics*  
                                 *Annals of Applied Statistics*

2012-2014                Statistical consultant  
                                 Statistics consulting workshop, Stanford University

## HONORS AND AWARDS

2018	ICSA 2018 Conference Young Researcher Award
2016	SFASA Student Travel Award for 2016 Joint Statistical Meeting
2015	Stanford Statistics Department Teaching Assistant Award

## PUBLICATIONS

### Peer-reviewed Journal Articles

1. **Jingshu Wang**, Divyansh Agarwal, Mo Huang, Gang Hu, Zilu Zhou, and Nancy R. Zhang. Transfer Learning for Single Cell Transcriptomics Improves Data Denoising and Pattern Discovery. *Nature Methods*, to appear
2. Qingyuan Zhao, Yang Chen, **Jingshu Wang**, and Dylan S. Small. Powerful genome-wide design and robust statistical inference in two-sample summary-data Mendelian randomization. *International Journal of Epidemiology*, to appear
3. Qingyuan Zhao, **Jingshu Wang**, Jack Bowden, Dylan S. Small. Statistical Inference in Two-sample Summary-data Mendelian Randomization Using Robust Adjusted Profile Score. *Annals of Statistics*, to appear
4. Qingyuan Zhao, **Jingshu Wang**, Jack Bowden, Dylan S. Small. Two-sample Instrumental Variable Analyses Using Heterogeneous Samples. *Statistical Science*, to appear
5. **Jingshu Wang** and Art B. Owen. Admissibility in Partial Conjunction Testing, 2019. *Journal of the American Statistical Association* 114, 158-168
6. **Jingshu Wang**, Mo Huang, Eduardo Torre, Hannah Dueck, Sydney Shaffer, John Murray, Arjun Raj, Mingyao Li and Nancy R. Zhang. Gene Expression Distribution Deconvolution in Single Cell RNA Sequencing, 2018. *Proceedings of National Academy of Sciences* 115(28), E6437-E6446
7. Mo Huang, **Jingshu Wang**, Eduardo Torre, Hannah Dueck, Sydney Shaffer, Roberto Bonasio, John Murray, Arjun Raj, Mingyao Li and Nancy R. Zhang. Gene Expression Recovery For Single Cell RNA Sequencing, 2018. *Nature Methods* 15, 539-542
8. **Jingshu Wang\***, Qingyuan Zhao\*, Trevor Hastie and Art B. Owen. Confounder Adjustment in Multiple Hypotheses Testing, 2017. *Annals of Statistics* 45, 1863-1894
9. Art B. Owen and **Jingshu Wang**. Bi-cross-validation for Factor Analysis, 2016. *Statistical Science* 31, 119-139

### Articles under Review

10. Zilu Zhou, Chengzhong Ye, *Jingshu Wang* and Nancy R. Zhang. Surface protein imputation from single cell transcriptomes by deep neural networks, 2019. Under review in *Nature Communications*

## **Preprints**

11. **Jingshu Wang**, Weijie Su, Chiara Sabatti and Art B. Owen. Detecting Replicating Signals using Adaptive Filtering Procedures with the Application in High-throughput Experiments, 2017.

## **Working papers**

12. **Jingshu Wang**, Qingyuan Zhao, Jack Bowden, Gibran Hemani, George Davey Smyth, Nancy R. Zhang and Dylan S. Small. A Comprehensive Framework for Genomewide Mendelian Randomization Under Pervasive Pleiotropy, 2018.
13. **Jingshu Wang**, Zilu Zhou, Jennifer E. Cremins, Nancy R. Zhang. Statistical Modeling for 3D Genome HiC data under Loop Extrusion, 2018.

## **PRESENTATION**

### **Invited Seminars and Conference Presentations**

1. (2019) Joint Statistical Meeting, Denver, CO
2. (2019) ISMB/ECCB 2019 Basel, Swiss (Tutorial)
3. (2019) IMS China Meeting, China
4. (2019) ICSA China Conference, China
5. (2018) ICSA China Conference on Data Science, China
6. (2018) 2nd International Conferences on Econometrics and Statistics (EcoSta), China
7. (2017) Department of Statistics, Tel Aviv Univeristy, Israel
8. (2016) 10th ICSA International Conference, China
9. (2015) Department of Statistics, University of California, Davis, CA

### **Contributed Conference Presentations and Posters**

1. (2018) ASHG, San Diego, CA (Poster)
2. (2017) ASHG, Orlando, FL (Poster talk)
3. (2017) 10th International Conference on Multiple Comparison Procedures, Riverside, CA (Talk)
4. (2016) Joint Statistical Meeting, Chicago, IL (Talk)
5. (2015) 9th International Conference on Multiple Comparison Procedures, India (Talk)
6. (2015) Stanford BioX symposium (Poster)
7. (2014) 2014 Joint Statistical Meeting, Boston, MA (Talk)
8. (2014) ICSA-KISS Applied Statistics Symposium, Portland, OR (Talk)

## **TEACHING EXPERIENCE**

(All in Department of Statistics, Stanford University)

### **Instructor**

Stats110 Statistical Methods in Engineering and Physical Science (Summer 2016)

### **Teaching Assistant**

Stats305 Introduction to Statistical Modeling (Autumn, 2014/2015)

Stats314 Empirical Likelihood (Autumn, 2013)

Stats315B Modern Applied Statistics: Data Mining (Spring, 2014/2015)

Stats315A Modern Applied Statistics, Learning (Winter, 2014)

Stats253 Analysis of Spatial and Temporal Data (Summer, 2014/2015)

Stats209 Introduction to Bootstrap (Spring, 2014)

Stats110 Statistical Methods in Engineering and Physical Science (Autumn, 2012)

Stats60 Introduction to Statistical Methods: Precalculus (Summer, 2012)