Yuhao Wang

website https://yuhaow.github.io

APPOINTMENTS

Research Associate
Statistical Laboratory, University of Cambridge, Cambridge, UK 08/2019 - present

EDUCATION

Doctoral of Philosophy
Department of EECS, Massachusetts Institute of Technology, Cambridge, MA, USA 06/2019
Advisor: Professor Caroline Uhler

Master of Science
Department of EECS, Massachusetts Institute of Technology, Cambridge, MA, USA 06/2016
Advisor: Professor Bonnie Berger

Bachelor of Engineering
Department of Automation, Tsinghua University, Beijing, China 07/2014

MAIN RESEARCH INTERESTS

causal inference, *high-dimensional statistics*.

PUBLICATIONS

(**: equal contribution; *: alphabetical order)

Referred Publications

- **Y. Wang**, S. Segarra, C. Uhler. *High-dimensional joint estimation of multiple directed Gaussian graphical models,* Electronic Journal of Statistics, to appear, preprint available at arXiv:1804.00778
- **Y. Wang**, U. Roy, C. Uhler. *Learning High-dimensional Gaussian Graphical Models under Total Positivity without Adjustment of Tuning Parameters,* AISTATS 2020
- A. Carpentier*, O. Collier*, L. Comminges*, A. B. Tsybakov*, **Y. Wang***. *Minimax rate of testing in sparse linear regression,* Automation and Remote Control 80.10 (2019): 1817-1834. (special issue in memory of Yakov Tsypkin)
- **Y. Wang**, C. Squires, A. Belyaeva, C. Uhler. *Direct estimation of differences in causal graphs,* NeurIPS 2018
- **Y. Wang**, L. Solus, K. D. Yang, C. Uhler. *Permutation-based causal inference algorithms with interventions,* NIPS 2017 (**accepted as spotlight, 4% acceptance**)
- S. Segarra, **Y. Wang**, C. Uhler, Antonio G Marques. *Joint inference of networks from stationary graph signals,* Asilomar Conference on Signals, Systems, and Computers 2017
- Y. Orenstein, **Y. Wang**, B. Berger. *RCK: accurate and efficient inference of sequence and structure-based protein-RNA binding models from RNAcompete data,* ISMB 2016 (**best student paper**)
- H. Xin**, E. Cicek**, **Y. Wang****, M. Schulz, H. Le, Z. Bar-Joseph. *De novo ChIP-seq analysis*, Genome biology 16.1 (2015): 205.
- **Y. Wang**, J. Zeng, *Predicting drug-target interactions using restricted Boltzmann machines,* ISMB 2013; Bioinformatics 29.13 (2013): i126-i134.

Submitted for Review

- L. Solus, **Y. Wang**, C. Uhler. *Consistency guarantees for permutation based causal inference algorithms,* submitted to Biometrika, preprint available at arXiv:1702.03530

TEACHING EXPERIENCE

Teaching Assistant 09/2016 – 01/2017
6.867 Machine Learning, Massachusetts Institute of Technology

INTERNSHIP EXPERIENCE

Research Intern 06/2018 – 08/2018
Advertisement Science Team, Yahoo! Research. Advisor: Dr. Jimmy Yang

Student Intern 07/2013 – 08/2013
School of Computer Science, Carnegie Mellon University. Advisor: Professor. Ziv Bar-Joseph

CONFERENCES AND INVITED TALKS

Learning high-dimensional Gaussian graphical models under total positivity without tuning parameters, Machine Learning Theory Workshop, Peking University, Beijing, China. 06/2019

Learning high-dimensional Gaussian graphical models under total positivity without tuning parameters, Barcelona Graduate School of Economics, Barcelona, Spain. 05/2019

Provable algorithms for statistical challenges in data driven decision making, Krannert School of Management, Purdue University, West Lafayette, IN, USA. 02/2019

Provable algorithms for statistical challenges in data driven decision making, The Chinese University of Hong Kong (Shenzhen), Shenzhen, China. 01/2019

Provable Algorithms for Statistical Challenges in Data Driven Decision Making, Tsinghua University, Beijing, China. 12/2018

Direct estimation of differences in causal graphs. International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics), Pisa, Italy. 12/2018

Robust estimation of high-dimensional graphical models under total positivity. MIT Applied Algebra Day, Cambridge, MA, USA. 11/2018

Direct estimation of differences in causal graphs. MIT-IBM AI Research Week and AI Horizons Colloquium, Cambridge, MA, USA. 09/2018

Permutation-based causal inference algorithms with interventions. Advances in Neural Information Processing Systems (NIPS), Long Beach, CA, USA (*spotlight* presentation). 12/2017

High-dimensional joint estimation of multiple directed Gaussian graphical models. ICMS Workshop Learning Graphical Models in High-Dimensional Settings. Edinburgh, UK. 04/2017

COMMUNITY SERVICE

Reviewer-Journals: Biometrics; Biometrika; Journal of Machine Learning Research

Reviewer-Conferences: ICML2018; NeurIPS 2018; ICML 2019; NeurIPS 2019; AAAI 2020; ICLR 2020; STOC 2020; UAI 2020