

# Weichi Yao

## Curriculum Vitae

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## EDUCATION

- Sept. 2017 - **Ph.D., Stern School of Business, New York University**,  
present *Department of Technology, Operations, and Statistics*,  
Advisor: Professor Halina Frydman. Email: [hfrydman@stern.nyu.edu](mailto:hfrydman@stern.nyu.edu).
- Sept. 2015 - **M.A., Graduate School of Arts and Sciences, Columbia University**,  
Dec. 2016 *Department of Statistics*.  
GPA: 3.8/4.0
- Sept. 2011 - **B.A., Economics & Management School, Wuhan University**,  
June 2015 *Department of Finance*.  
GPA: 3.8/4.0
- Sept. 2012 - **B.A., Mathematics & Statistics School, Wuhan University**,  
June 2015 *Department of Applied Mathematics*.  
GPA: 3.9/4.0

## RESEARCH

### ONGOING PROJECTS

- **W. Yao** and Y. Wang. [Deep active learning and active optimization](#).
- **W. Yao**, S. Villar, D. W. Hogg. [Equivariant Hamiltonian NNs and Neural ODEs](#).
- **W. Yao**, J. Loftus. [Is the best good enough? The direction of selection bias for high-dimensional goodness-of-fit tests](#).

### PREPRINTS

- [1] S. Villar, D. W. Hogg, K. Storey-Fisher, **W. Yao** and B. Blum-Smith. [Scalars are universal: Gauge-equivariant machine learning, structured like classical physics](#). *arXiv:2106.06610*, 2021.  
[LINK](#) [CODE](#)
- [2] **W. Yao**, H. Frydman, D. Larocque and J. S. Simonoff. [Ensemble methods for survival data with time-varying covariates](#). *arXiv:2006.00567*, 2020.  
[LINK](#) [CODE](#)

### PUBLICATIONS

- [3] Hoora Moradian, **W. Yao**, D. Larocque, J. S. Simonoff and H. Frydman. [Dynamic estimation with random forests for discrete-time survival data](#). *The Canadian Journal of Statistics (to appear)*, 2021.  
[LINK](#) [CODE](#)

- [4] **W. Yao**, H. Frydman and J. S. Simonoff (2021). [An ensemble method for interval-censored time-to-event data](#). *Biostatistics*, 22(1):198-213.  

LINK
CODE
- [5] **W. Yao**, A. S. Bandeira and S. Villar. [Experimental performance of graph neural networks on random instances of max-cut](#). In *Proceedings of the Society of Photographic Instrumentation Engineers*, 2019.  

LINK
CODE
- [6] J. H. Lee, D. E. Carlson, H. S. Razaghi, **W. Yao**, G. A. Goetz, E. Hagen, E. Batty, E. J. Chichilnisky, G. T. Einevoll and L. Paninski. [YASS: Yet Another Spike Sorter](#). In *Proceedings of the Advances in Neural Information Processing Systems (NeurIPS)*, 4005-4015, 2017.  

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## INTERNSHIP

2016–2017 **Research Intern**, GROSSMAN CENTER FOR THE STATISTICS OF MIND, Columbia University, Professor Liam Paninski.

As a research assistant working in the neuroscience lab on projects that develop statistical methodology for understanding how neurons encode information.

## TEACHING

2020 **Course Instructor**, *STAT-UB1-001 Statistics for Business Control*.

This is the introductory statistics class at Stern NYU.

2019–2021 **Teaching Fellow**, *XBA1-GB.8314: Operations Analytics*.

2021 **Teaching Fellow**, *STAT-GB.3205: Analytics & Machine Learning for Managers*.

2021 **Teaching Fellow**, *STAT-GB.3321: Introduction to Stochastic Processes*.

2020 **Teaching Fellow**, *STAT-UB.0103: Statistics for Business Control Regress & Forecasting Models*.

2018 **Teaching Fellow**, *COR1-GB.1305: Statistics and Data Analysis*.

## FELLOWSHIP, PRIZES OR AWARDS

2014 **Honorable Mention**, Mathematical Contest in Modeling (MCM)

2013 **Second Prize**, Symphony Orchestra, National College Students Art Exhibition, China

2009 **Gold Award**, Symphony Orchestra, Australian International Music Festival, Australia

## SKILLS

Languages Python

Software Matlab, R, SAS

## EXTRA-CURRICULAR

2011 - 2014 **Violinist**, Symphony Orchestra, Wuhan University.

2009 - 2011 **Violinist**, Symphony Orchestra, Guangdong Experimental High School.