YONGYI GUO

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[Personal website](#) ⋄ [Google scholar profile](#)

EDUCATION

PhD Candidate, Princeton University September 2016 - Present

Department of Operations Research and Financial Engineering *Advisor: Prof. Jianqing Fan*

Overall GPA: 3.97

Bachelor of science, Peking University September 2012 - July 2016

School of Mathematical Sciences

Overall GPA: 3.88 (Rank: 2/180)

PUBLICATIONS AND PREPRINTS

Policy Optimization Using Semiparametric Models for Contextual Dynamic Pricing

Jianqing Fan, Yongyi Guo, Maxine Yu

Submitted.

Machine Learning for Variance Reduction in Online Experiments

Yongyi Guo, Dominic Coey, Mikael Konutgan, Wenting Li, Chris Schoener, Matt Goldman

Conference on Neural Information Processing Systems, 2021

Best subset selection is robust against design dependence

Jianqing Fan, Yongyi Guo, Ziwei Zhu

Submitted.

Communication-Efficient Accurate Statistical Estimation

Jianqing Fan, Yongyi Guo, Kaizheng Wang

Journal of the American Statistical Association 1–11. (Online)

Adaptive Huber Regression on Markov Dependent Data

Jianqing Fan, Yongyi Guo, Bai Jiang

Stochastic Processes and their Applications, to appear.

Stochastic Robustness and Relative Stability of Multiple Pathways in Biological Networks

Yongyi Guo, Zhiyi You, Min Qian, Hao Ge

Science China Mathematics 2017, 47:1831 – 1852. (Winner of Excellent Paper Award)

ONGOING PROJECTS

Near Optimal Structured Contextual Dynamic Pricing

Joint work with Prof. Jianqing Fan and Maxine Yu

RESEARCH PRESENTATIONS

Machine Learning for Variance Reduction in Online Experiments December 2021

Thirty-fifth Conference on Neural Information Processing Systems

Policy Optimization Using Semiparametric Models for Contextual Dynamic Pricing
Cornell ORIE Young Researchers Workshop (poster presentation) October 2021

Machine Learning for Variance Reduction in Online Experiments November 2020
2020 Conference on Digital Experimentation (CODE) @ MIT

AWARDS AND HONORS

First Place in Citadel Philadelphia Datathon 2017

Gordon-Wu Fellowship (Princeton University) 2016
For top 3% graduate students

P. L. Hsu. gold medal in Shing Tung Yau College Student Mathematical Contests 2015
(In statistics and probability)

National Scholarship (Ministry of Education of China) 2013, 2015
For top 1% college students

Silver medal in Chinese Mathematical Olympiad 2012

TEACHING EXPERIENCE

ORF525: Statistical Foundations of Data Science Spring 2020
Assistant in Instruction (Instructor: Prof. Jianqing Fan)

ORF309-EGR309: Probability and Stochastic Systems Spring 2019, Spring 2021
Assistant in Instruction (Instructor: Prof. Ramon van Handel)

ORF405: Regression and Applied Time Series Fall 2019, Fall 2020
Assistant in Instruction (Instructor: Prof. Ludovic Tangpi)

ORF411: Sequential Decision Analytics and Modeling Fall 2018
Assistant in Instruction (Instructor: Prof. Warren Powell)

ORF245-EGR245: Fundamentals of Statistics Fall 2017, Spring 2018
Assistant in Instruction (Instructor: Prof. Jianqing Fan)

WORK EXPERIENCE

Facebook Research (Core Data Science) June 2020 - August 2020
Research intern

Susquehanna International Group LLP June 2019 - August 2019
Quantitative research intern