

# YONGYI GUO

222 Sherrerd Hall, Princeton University, Princeton 08544  $\diamond$  (609)  $\cdot$  937  $\cdot$  4979  $\diamond$  yongyig@princeton.edu

## EDUCATION

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**PhD Candidate, Princeton University**

*Department of Operations Research and Financial Engineering*

Overall GPA: 3.97

September 2016 - Present

*Advisor: Prof. Jianqing Fan*

**Bachelor of science, Peking University**

*School of Mathematical Sciences*

Overall GPA: 3.88 (Rank: 2/180)

September 2012 - July 2016

## PUBLICATIONS AND PREPRINTS

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**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* (accepted)

**Adaptive Huber Regression on Markov Dependent Data**

Jianqing Fan, Yongyi Guo, Bai Jiang

*Stochastic Processes and their Applications* (accepted)

**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

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**Near Optimal Structured Contextual Dynamic Pricing**

Joint work with Prof. Jianqing Fan and Maxine Yu

## RESEARCH PRESENTATIONS

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**Machine Learning for Variance Reduction in Online Experiments**

December 2021

*Thirty-fifth Conference on Neural Information Processing Systems (poster presentation)*

**Policy Optimization Using Semiparametric Models for Contextual Dynamic Pricing**

*Cornell ORIE Young Researchers Workshop (poster presentation)*

October 2021

## AWARDS AND HONORS

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<b>First Place in Citadel Philadelphia Datathon</b>	2017
<b>Gordon-Wu Fellowship (Princeton University)</b> <i>For top 3% graduate students</i>	2016
<b>P. L. Hsu. gold medal in Shing Tung Yau College Student Mathematical Contests</b> <i>(In statistics and probability)</i>	2015
<b>National Scholarship (Ministry of Education of China)</b> <i>For top 1% college students</i>	2013, 2015
<b>Silver medal in Chinese Mathematical Olympiad</b>	2012

## TEACHING EXPERIENCE

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<b>ORF525: Statistical Foundations of Data Science</b> <i>Assistant in Instruction (Instructor: Prof. Jianqing Fan)</i>	Spring 2020
<b>ORF309-EGR309: Probability and Stochastic Systems</b> <i>Assistant in Instruction (Instructor: Prof. Ramon van Handel)</i>	Spring 2019, Spring 2021
<b>ORF405: Regression and Applied Time Series</b> <i>Assistant in Instruction (Instructor: Prof. Ludovic Tangpi)</i>	Fall 2019, Fall 2020
<b>ORF411: Sequential Decision Analytics and Modeling</b> <i>Assistant in Instruction (Instructor: Prof. Warren Powell)</i>	Fall 2018
<b>ORF245-EGR245: Fundamentals of Statistics</b> <i>Assistant in Instruction (Instructor: Prof. Jianqing Fan)</i>	Fall 2017, Spring 2018

## WORK EXPERIENCE

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<b>Facebook Research (Core Data Science)</b> <i>Research intern</i>	June 2020 - August 2020
<b>Susquehanna International Group LLP</b> <i>Quantitative research intern</i>	June 2019 - August 2019