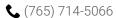
# Yao Ji



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**Q** 324F Grissom Hall, West Lafayette, IN, 47907

#### **EDUCATION**

Aug. 2019 – Aug. 2024 (expected)

## Ph.D., School of Industrial Engineering

Purdue University, West Lafayette, Indiana

- Major: Operation Research
- Committee: Gesualdo Scutari (co-chair), Harsha Honnappa (co-chair), Raghu Pasupathy, Alex L.
  Wang

Aug. 2016 - June 2019

## M.S., School of Mathematical Sciences

Beijing Normal University, Beijing, China

- Major: Probability and Mathematical Statistics; Core GPA: 93.8/100
- Thesis: Conditional Limit Theorem of Bellman-Harris Branching Porcess

Aug. 2012 - June 2016

## B.S., School of Mathematical Sciences

Beijing Normal University, Beijing, China

- · Major: Statistics; GPA: 89.3/100
- Thesis: Conceptual New Proofs of Geometric Convergence of Moment Generating Function for Galton-Waston Process in the Noncritical Cases

### RESEARCH INTEREST

Statistical Machine Learning, Decentralized Estimation and Inference, Distributed Optimization Theory, Stochastic Optimization, High-dimensional Probability and Statistics

#### **PUBLICATIONS**

Apr. 2023 **Yao Ji**, Gesualdo Scutari, Ying Sun, Harsha Honnappa "Distributed (ATC) Gradient Descent for High Dimension Sparse Regression" *In IEEE Transactions on Information Theory (Early Access)*.

**Yao Ji**, Gesualdo Scutari, Ying Sun, Harsha Honnappa "Distributed Sparse Regression via Penalization", *In Journal of Machine Learning Research (Accepted)*.

Oct. 2018 Vladimir Vatutin, **Yao Ji**, Wenming Hong "Reduced critical Bellman–Harris branching processes for small populations", *In Journal Discrete Mathematics and Applications*.

#### **WORKING PAPERS**

**Yao Ji**, Gesualdo Scutari, Harsha Honnappa "Distributed Composite Stochastic Mirror Descent for Stochastic Optimization"

- Stochastic optimization and sparse statistical recovery over a network; Unified decentralized stochastic mirror descent
- Unification of decentralized stochastic mirror descent

## **AWARDS AND HONORS**

- 2023 Graduate School Summer Research Grant, Purdue University
- 2019, 2020 Ross Fellowship, Purdue University
  - 2019 Dr. Theodore J. and Isabel M. Williams Fellowship in Industrial Control Systems, Purdue University
  - 2018 First Prize Scholarship (ranked 2/53, School of Mathematics), Beijing Normal University
  - 2017 First Prize Scholarship (ranked 1/12, Markov Process), Beijing Normal University
  - 2017 Outstanding Teaching Assistant for Measure Theory, Beijing Normal University
  - 2016 Outstanding Undergraduate Thesis in School of Mathematics, Beijing Normal University
  - 2015 First Prize Scholarship (Top 5%), School of Mathematics, Beijing Normal University

2014	Second Prize Scholarship (Top 20%), School of Mathematics, Beijing Normal University
2014	Second Prize in China Undergraduate Mathematical Contest in Modeling (Top 5%), School of Mathematics, Beijing Normal University
POSTER PRESENTATION	
July. 2022	The seventh International Conference on Continuous Optimization (ICCOPT) and the Modeling and Optimization, Lehigh, Bethlehem
May. 2023	Midwest Machine Learning Symposium, UIC, Chicago
May. 2023	Statistics and Optimization in Data Science Workshop, Purdue, West Lafayette
TEACHING EXPERIENCE	
Jan. 2023 – Present	IE 33500 Operation Research, Teaching Assistant, Purdue
Aug. 2022 – Jan. 2023	IE 33000 Probability and Statistics in Engineering, Teaching Assistant, Purdue
Aug. 2022 – Jan. 2023	IE 59000 Introduction to Optimization Algorithms (graduate level), Teaching Assistant, Purdue
Sep. 2017 – Jan. 2018 Sep. 2018 – Jan. 2019	Measure Theory, Teaching Assistant, School of Mathematical Sciences, Beijing Normal University
SERVICE	
Jan. 2023 – Present	IEEE International Symposium on Information Theory (ISIT), Operation Research