

## Education

- 2017–2023 **Stanford University**, *Stanford, CA*.
- PhD in Management Science and Engineering
  - Concentration area: Operations Research
  - Advisor: Peter W. Glynn
- 2014–2017 **Stanford University**, *Stanford, CA*.
- PhD Candidate in Mechanical Engineering (incomplete degree)
- 2017 **Stanford University**, *Stanford, CA*.
- MS in Statistics
- 2015 **Stanford University**, *Stanford, CA*.
- MS in Mechanical Engineering
- 2012 **Georgia Institute of Technology**, *Atlanta, GA*.
- BS in Mechanical Engineering (with highest honors)
  - Minor in Biology

## Employment

- 2024– **Kellogg School of Management, Northwestern University**, *Evanston, IL*.
- Assistant Professor of Operations
- 2023–2024 **Amazon**, *New York, NY*.
- Postdoctoral Scientist in Supply Chain Optimization Technologies

## Research Interests

- Broadly at the interface of applied probability and data-driven operations
- Specializations in multi-armed bandits, reinforcement learning, statistical inference for stochastic processes, and stochastic simulation

## Awards

- 2<sup>nd</sup> place, George Nicholson Student Paper Competition, 2022
- Stanford Centennial Teaching Assistant Award, 2021
- Dantzig-Lieberman Operations Research Fellowship, 2019, 2021
- National Science Foundation Graduate Research Fellowship, 2013
- Winner, 22<sup>nd</sup> Annual SAIC–Georgia Tech Student Paper Competition, 2011

## Journal Publications

1. Central Limit Theorems for Estimated Functions at Estimated Points
  - with Peter W. Glynn, Michael C. Fu, Jianqiang Hu, Yijie Peng
  - *Operations Research*, 2020
2. The Fragility of Optimized Bandit Algorithms
  - with Peter W. Glynn
  - *Operations Research*, 2024
  - 2<sup>nd</sup> place, George Nicholson Student Paper Competition, 2022

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## Preprints/Under Review

Latest versions are accessible here: <https://linfanf.github.io/research/>

3. Diffusion Approximations for Thompson Sampling
  - with Peter W. Glynn
4. Poisson Limits of Bernoulli Bandits
  - with Wenjia Ba, Peter W. Glynn, J. Michael Harrison
5. Statistical Inference for Markov Chains with Known Structure
  - with Peter W. Glynn
6. The Typical Behavior of Bandit Algorithms
  - with Peter W. Glynn
7. Robustness Benefits of Structured Bandits
  - with Peter W. Glynn
8. Change-Point Testing for Risk Measures in Time Series
  - with Junting Duan, Peter W. Glynn, Markus Pelger

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## In Preparation/Work in Progress

9. Regret Distribution of Bandits with Heavy-tailed Rewards
10. Subsample-based Inference for Markov Chains with Known Structure
  - with Peter W. Glynn
11. Smoothed Estimation for Markov Chains with Known Structure
  - with Peter W. Glynn
12. Semiparametric Inference for Markov Chains with Known Structure
  - with Peter W. Glynn

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## Earlier Journal Publications

13. Constant Tip-Surface Distance with Atomic Force Microscopy via Quality Factor Feedback
  - with Daniel Potter, Todd Sulchek
  - *Review of Scientific Instruments*, 2012
  - Winner, 22<sup>nd</sup> Annual SAIC–Georgia Tech Student Paper Competition, 2011
14. Break-Up of Droplets in a Concentrated Emulsion Flowing Through a Narrow Constriction
  - with Liat Rosenfeld, Yunhan Chen, Sindy K.Y. Tang
  - *Soft Matter*, 2014
15. A Remote Stereochemical Lever Arm Effect in Polymer Mechanochemistry
  - with Junpeng Wang, Tatiana B. Kouznetsova, Zachary S. Kean, Brendan D. Mar, Todd J. Martinez, Stephen L. Craig
  - *Journal of the American Chemical Society*, 2014
16. Sensory-Motor Systems of Copepods Involved in Their Escape from Suction Feeding
  - with Jeannette Yen, David W. Murphy, Donald R. Webster
  - *Integrative and Comparative Biology*, 2015

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## Teaching

- 2025– Core Operations Management
  - Role: Instructor
  - Institution: Kellogg School of Management
  - Level: MBA
- 2019–2023 Stochastic Calculus and Control
  - Role: Teaching Assistant
  - Institution: Stanford University, Management Science and Engineering
  - Level: PhD
- 2019–2022 Stochastic Modeling
  - Role: Teaching Assistant
  - Institution: Stanford University, Management Science and Engineering
  - Level: MS
- 2018–2020 Fundamentals of Data Science
  - Role: Teaching Assistant
  - Institution: Stanford University, Management Science and Engineering
  - Level: MS
- 2017 Introduction to Stochastic Modeling
  - Role: Teaching Assistant
  - Institution: Stanford University, Management Science and Engineering
  - Level: Undergraduate
- 2016 Introduction to Matrix Methods
  - Role: Teaching Assistant
  - Institution: Stanford University, Electrical Engineering
  - Level: Undergraduate

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## Professional Service

### Session Chair

- 2023 INFORMS Annual Meeting, Applied Probability Society
- 2024 INFORMS Annual Meeting, Applied Probability Society
- 2025 INFORMS Applied Probability Conference

### Referee

- *Operations Research*
- *Management Science*
- *Manufacturing & Service Operations Management*
- *Mathematics of Operations Research*
- *Annals of Applied Probability*