

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

- 2nd 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, 22nd 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
 - 2nd place, George Nicholson Student Paper Competition, 2022

3. Change-Point Testing for Risk Measures in Time Series
 - with Junting Duan, Peter W. Glynn, Markus Pelger
 - *Journal of Financial Econometrics*, 2026

Preprints/Under Review

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

4. Diffusion Approximations for Thompson Sampling in the Small Gap Regime
 - with Peter W. Glynn
5. Poisson Limits of Bernoulli Bandits
 - with Wenjia Ba, Peter W. Glynn, J. Michael Harrison
6. Statistical Inference for Markov Chains with Known Structure
 - with Peter W. Glynn
7. The Typical Behavior of Bandit Algorithms
 - with Peter W. Glynn
8. Regret Tails in Structured Bandits
9. Subsample-based Inference for Markov Chains with Known Structure

In Preparation/Work in Progress

10. Smoothed Estimation for Markov Chains with Known Structure
11. Semiparametric Inference for Markov Chains with Known Structure
 - with Peter W. Glynn

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, 22nd 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

Teaching

- 2026– Sequential Decision-making Under Uncertainty
 - Role: Instructor
 - Institution: Kellogg School of Management
 - Level: PhD
- 2025– Core Operations Management
 - Role: Instructor
 - Institution: Kellogg School of Management
 - Level: MBA and MBAi
- 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

Professional Service

Session Chair

- 2023 INFORMS Annual Meeting, Applied Probability Society
- 2024 INFORMS Annual Meeting, Applied Probability Society
- 2025 INFORMS Applied Probability Society Conference
- 2025 INFORMS Annual Meeting, Computing Society
- 2026 INFORMS Annual Meeting, Applied Probability Society

Referee

- *Operations Research*
- *Management Science*
- *Manufacturing & Service Operations Management*
- *Mathematics of Operations Research*
- *Annals of Applied Probability*
- *Annals of Statistics*
- *Journal of the American Statistical Association*