Lin Fan

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Education

09/2017— PhD Candidate, Management Science and Engineering, Stanford University.

- Research interests: applied probability, sequential learning and decision-making, statistical inference for stochastic processes, stochastic simulation
- o Advisor: Professor Peter W. Glynn
- 09/2014— PhD Candidate, Mechanical Engineering, Stanford University.
 - Inactive in program
 - 06/2017 **MS Statistics**, Stanford University.
 - 01/2015 MS Mechanical Engineering, Stanford University.
 - 05/2012 **BS Mechanical Engineering**, Georgia Institute of Technology.
 - With Highest Honors
 - Minor in Biology

Awards

Finalist, George Nicholson Student Paper Competition, 2022

Stanford Centennial Teaching Assistant Award, 2021

Dantzig-Lieberman Operations Research Fellowship, 2019, 2021

Stanford School of Engineering Fellowship, 2017, 2019

National Science Foundation Graduate Research Fellowship, 2013

Winner, 22nd Annual SAIC-Georgia Tech Student Paper Competition, 2011

Preprints

(Latest versions are accessible here: https://linfanf.github.io/research/)

- 1. L. Fan, P.W. Glynn, The Fragility of Optimized Bandit Algorithms.
- 2. L. Fan, P.W. Glynn, Diffusion Approximations for Thompson Sampling.
- 3. L. Fan, P.W. Glynn, Nonparametric Estimation of Markov Chain Expectations.
- 4. L. Fan, P.W. Glynn, The Typical Behavior of Bandit Algorithms.
- 5. L. Fan, P.W. Glynn, M. Pelger, Change-Point Testing for Risk Measures in Time Series.

Work In Progress

- 1. with W. Ba, P.W. Glynn, J.M. Harrison, Approximations for Bernoulli Bandits.
- 2. with P.W. Glynn, M. Pelger, Subsample-based Estimation of Markov Chain Expectations.
- 3. with P.W. Glynn, Gradient Estimation for Stochastic Networks.
- 4. with P.W. Glynn, Efficient Parametric Estimation of Markov Chain Expectations.

Journal Publications

1. P.W. Glynn, L. Fan, M.C. Fu, J. Hu, Y. Peng, Central Limit Theorems for Estimated Functions at Estimated Points, *Operations Research*, 68, 2020.

Earlier Journal Publications

- 2. J. Yen, D.W. Murphy, L. Fan, D.R. Webster, Sensory-Motor Systems of Copepods involved in their Escape from Suction Feeding, *Integrative and Comparative Biology*, 55, 2015.
- 3. J. Wang, T.B. Kouznetsova, Z.S. Kean, L. Fan, B.D. Mar, T.J. Martinez, S.L. Craig, A Remote Stereochemical Lever Arm Effect in Polymer Mechanochemistry, *Journal of the American Chemical Society*, 136, 2014.
- 4. L. Rosenfeld, L. Fan (<u>co-first author</u>), Y. Chen, S.K.Y. Tang, Break-up of droplets in a concentrated emulsion flowing through a narrow constriction, *Soft Matter*, 10, 2014.
- 5. L. Fan, D. Potter, T. Sulchek, Constant tip-surface distance with atomic force microscopy via quality factor feedback, *Review of Scientific Instruments*, 83, 2012.

Conference Presentations

- 1. 2022 INFORMS Annual Meeting, The Fragility of Optimized Bandit Algorithms.
- 2. 2020 INFORMS Annual Meeting, *Nonparametric Estimation of Markov Chain Expectations*.
- 3. 2018 NBER-NSF Time Series Conference, Change-Point Testing and Estimation for Risk Measures in Time Series.

Teaching Assistantships (at Stanford)

Stochastic Modeling (MS&E 221), Winter 2019, Spring 2021, Spring 2022 Fundamentals of Data Science (MS&E 226), Fall 2018, Fall 2019, Fall 2020 Stochastic Calculus and Control (MS&E 322), Spring 2019 Introduction to Stochastic Modeling (MS&E 121), Spring 2017 Introduction to Matrix Methods (CME/EE 103), Fall 2016

Professional Service

Reviewer for Operations Research, Management Science, Annals of Applied Probability