# Lin Fan

### 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, 22<sup>nd</sup> Annual SAIC-Georgia Tech Student Paper Competition, 2011

# Preprints/In Preparation

- 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, Subsampling 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 (co-first author), Y. Chen, S.K.Y. Tang, Break-up of droplets in a concentrated emulsion flowing through a narrow constriction, *Soft Matter*, 10, 2014. Featured on journal cover.
- 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), 2019, 2021, 2022 Fundamentals of Data Science (MS&E 226), 2018, 2019, 2020 Stochastic Calculus and Control (MS&E 322), 2019 Introduction to Stochastic Modeling (MS&E 121), 2017 Introduction to Matrix Methods (CME/EE 103), 2016

## Professional Service

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