2521 Hearst Avenue, Berkeley, CA, 94709

## **EDUCATION**

UC Berkeley [GPA: 4.00/4.00, Advisor: Xin Guo]

Aug. 2016 - Aug. 2022 (expected)

Ph.D., Industrial Engineering and Operations Research (IEOR) (in progress)

M.S., Industrial Engineering and Operations Research (IEOR)

Courses: Probability Theory (A+), Applied Stochastic Processes I, II (A+), Theoretical Statistics (A+), Convex Optimization and Approximation (A+), Network Flows and Graphs (A+), Mathematical Programming (A+)

Peking University [GPA: 3.74/4.00, Advisor: Zaiwen Wen]

Sept. 2012 - July. 2016

B.S., School of Mathematical Sciences (SMS), Department of Probability and Statistics

### **PUBLICATIONS & PREPRINTS**

• A General Framework for Learning Mean-Field Games

X. Guo, A. Hu, R. Xu and J. Zhang. Preprint, arXiv:2003.06069.

Accepted, Mathematics of Operations Research (MOR).

• Theoretical Guarantees of Fictitious Discount Algorithms for Episodic Reinforcement Learning and Global Convergence of Policy Gradient Methods

X. Guo, A. Hu and J. Zhang. *Preprint*, <u>arXiv: 2109.06362</u>. To appear, AAAI Conference on Artificial Intelligence, 2022.

• Learning Mean-Field Games

X. Guo, A. Hu, R. Xu and J. Zhang. Neural Information Processing Systems (NeurIPS), 2019.

Consistency and Computation of Regularized MLEs for Multivariate Hawkes Processes

X. Guo, A. Hu, R. Xu and J. Zhang. *Preprint*, <u>arXiv:1810.02955</u>. Short version appeared in NeurIPS 2018 Workshop on Causal Learning.

• Logarithmic Regret for Episodic Continuous-Time Linear-Quadratic Reinforcement Learning over a Finite-Time Horizon

M. Basei, X. Guo, A. Hu and Y. Zhang. Preprint, arXiv:2006.15316, submitted to J. Mach. Learn. Res.

• Reinforcement Learning for Linear-Convex Models with Jumps via Stability Analysis of Feedback Controls X. Guo and A. Hu and Y. Zhang. *Preprint*, <u>arXiv:2104.09311</u>, revision, SIAM J. Control Optim.

## **WORK EXPERIENCE**

May. 2019 – Aug. 2019 Applied Scientist Intern, Amazon, Seattle

Manager: Dr. Xinyang Shen

Data-Driven Large-Scale Inbound Behavior Prediction for Third-Party Sellers

# **INVITED TALKS & PROFESSIONAL SERVICES**

- INFORMS Annual Meeting, 2018 (Phoenix, AZ), 2019 (Seattle, WA), 2020 (Virtual)
- Neural Information Processing Systems, Poster, Vancouver, December 10, 2019
- Berkeley-Stanford Workshop on Mathematical and Computational Finance, Stanford University, CA (July. 2018)
- Graduate student instructor for IEOR 120/170/172/221/241/263B
- Reviewer: Journal of Optimization Theory and Applications (JOTA), Mathematical Finance, NeurIPS 2021/2022,
  ICLR 2022, ICML 2022

### HONORS AND AWARDS

<u> </u>		
•	Outstanding Graduate Student Instructor (top 10%)	2021
•	Berkeley Marshall-Oliver-Rosenberger Fellowship	2020
•	NeurIPS Travel Award	2019
•	Berkeley IEOR First Year Faculty Fellowship Award	2017
•	Baosteel Scholarship, Peking University (top 0.1%)	2015
•	Meritorious Award of 2015 ICM	2015
•	First Prize of 2015 Challenge Cup, Peking University	2015

## **SKILLS**

- **Programming & Software:** Python, Matlab, R, SQL, LaTeX
- **Specialization:** Applied Probability, Reinforcement Learning, Statistical/Machine Learning, Optimization