|  |  |
| --- | --- |
| Anran Hu |  |
| anran\_hu@berkeley.edu Tel: 510-693-2808 |
|  | 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*](https://arxiv.org/abs/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,* [*arXiv: 2109.06362*](https://arxiv.org/abs/2109.06362)*.*

*To appear, AAAI Conference on Artificial Intelligence, 2022.*

* [**Learning Mean-Field Games**](https://proceedings.neurips.cc/paper/2019/hash/030e65da2b1c944090548d36b244b28d-Abstract.html)

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,* [*arXiv:1810.02955*](https://arxiv.org/abs/1810.02955)*.*

*Short version appeared in* [*NeurIPS 2018 Workshop on Causal Learning*](https://sites.google.com/view/nips2018causallearning/home)*.*

* **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*](https://arxiv.org/abs/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,* [*arXiv:2104.09311*](https://arxiv.org/abs/2104.09311)*, 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**

* 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