

Yunfan Zhao

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EDUCATION

Columbia University

New York, NY

Ph.D. in Operations Research, School of Engineering and Applied Science

September 2019 - Present

Advisor: Adam N. Elmachoub

Johns Hopkins University

Baltimore, MD

Combined B.S. / M.S. in Applied Mathematics and Statistics

September 2014 - December 2018

UNDER REVIEW

- *Elmachoub, A. N., *Lam, H., *Zhang, H., *Zhao, Y. Estimate-Then-Optimize Versus Integrated-Estimation-Optimization: A Stochastic Dominance Perspective. *Under Review at COLT*.
- *Zhao, Y., *Pan, Q., *Choromanski, K., Jain, D., Sindhvani, V. Implicit Two-Tower Policies. *Under review at ICML*.
- *Choromanski, K., *Sehanobish, A., *Lin H., *Zhao, Y., Berger, E., et al, A. Efficient Graph Field Integrators Meet Point Clouds. *Under review at ICML*.

PUBLICATIONS

- *Elmachoub, A. N., *Gupta, V., *Zhao, Y. Balanced Off-Policy Evaluation for Personalized Pricing. *To appear, AISTATS 2023*.
- *Kpotufe, S., *Yuan, G., *Zhao, Y. Nuances in Margin Conditions Determine Gains in Active Learning. *AISTATS, 2022*.
- Zhao, Y., Wierman, J., Marge, T. Efficient and Perfect Domination on Archimedean Lattices. *Electronic Journal of Combinatorics, 2022*.
- Zhao, Y., Marge, T., Wierman, J. Perfect Domination Ratios of Archimedean Lattices. *Congressus Numerantium, Vol 231, p. 39-61, 2019*.
- Marge, T., Zhao, Y., Wierman, J. Efficient and Non-efficient Domination of Archimedean Lattices. *Congressus Numerantium, Vol 231, p. 95-108, 2019*.

INDUSTRY EXPERIENCE

Experian Labs, *Data Scientist Intern*

May 2022 - August 2022

- Created DeFi credit rating model from scratch; predicted liquidation events in crypto lending.
- Collected data from vendors' APIs and from lending protocols using time-traveling queries on Ethereum blockchain.
- Generated features using Spark; iteratively added features; analyzed feature importance and correlation.
- Fine-tuned XGBoost model; dealt with imbalanced data; analyzed ROC, PRC, KS and crypto-wallet level labels.
- Delivered the model at the end of the summer; model AUC matched the best in the industry.

TEACHING (Columbia University)

IEOR 3106 Stochastic Systems and Applications

Fall 2022

IEOR 4101/4100 Probability, Statistics, and Simulation.

Fall 2021

IEOR 4418 Transportation Logistics and Analytics.

Spring 2020