

Dung (Daniel) Ngo

Computer Science Ph.D. Student, University of Minnesota, Minneapolis, MN
ngo00054@umn.edu — (717) 713-3090 — www.linkedin.com/in/ngod207 — dtngo.com

RESEARCH INTERESTS

Machine Learning theory, Algorithmic Game Theory, Incentive-Aware Machine Learning, Incentivized Exploration, Exploration-Exploitation tradeoff, Causal Inference, Bandits Algorithm, Differential Privacy, Strategic Learning, Federated Learning.

EDUCATION

University of Minnesota, Minneapolis, MN
Computer Science Ph.D. Student
Advisors: Steven Wu and Maria Gini

August 2019 — Present

Dickinson College, Carlisle, PA
Bachelor of Science: Computer Science (*summa cum laude*)
Bachelor of Science: Mathematics (*summa cum laude*)

August 2015 — May 2019

PUBLICATIONS

Conference Proceedings:

1. Xinyan Hu*, **Daniel Ngo**, Zhiwei Steven Wu, and Aleksandrs Slivkins. *Incentivizing Combinatorial Bandit Exploration*. Neural Information Processing Systems (NeurIPS), 2022.
2. **Daniel Ngo**, Giuseppe Vietri, and Zhiwei Steven Wu. *Improved Regret for Differentially Private Exploration in LinearMDP*. International Conference on Machine Learning (ICML), 2022.
3. Keegan Harris, **Daniel Ngo**, Logan Stapleton, Hoda Heidari, and Zhiwei Steven Wu. *Strategic Instrumental Variable Regression: Recovering Causal Relationships From Strategic Responses*. International Conference on Machine Learning (ICML), 2022.
4. **Daniel Ngo**, Logan Stapleton, Vasilis Syrgkanis, and Zhiwei Steven Wu. *Incentivizing Exploration with Algorithmic Instruments*. International Conference on Machine Learning (ICML), 2021.

Working Papers:

1. **Daniel Ngo**, Keegan Harris, Anish Agarwal, Vasilis Syrgkanis, and Zhiwei Steven Wu. *Incentive-Aware Synthetic Control: Accurate Counterfactual Estimation via Incentivized Exploration*. https://dtngo.com/IE_in_Panel_Data.pdf
2. Shengyuan Hu, **Daniel Ngo**, Shuran Zheng, Virginia Smith, and Zhiwei Steven Wu. *Federated Learning as a Network Effects Game*. <https://arxiv.org/pdf/2302.08533.pdf>
3. Jane Hsieh, Angie Zhang, Erik Chou, Mialy Rasetarinera, **Daniel Ngo**, Jason Carpenter, Min Kyung Lee, and Haiyi Zhu. *Supporting Worker Needs and Advancing Policy: Exploring Gig Worker-Centered Data-Sharing Alternatives*

AWARDS AND HONORS

GAGE Fellowship
University of Minnesota

August 2019, May 2020

Alpha Lambda Delta
Math honors society, inducted as a junior

April 2018

Upsilon Pi Epsilon
Computer Science honors society, inducted as a junior

April 2018

TALKS

1. "Incentive-Aware Synthetic Control: Accurate Counterfactual Estimation via Incentivized Exploration"
INFORMS Annual Meeting (October 2023)
2. "Incentivizing Exploration with Algorithmic Instruments"
IMCL 2021 (July 2021, Short Presentation)

*Denotes equal contribution and/or alphabetical ordering

SERVICE

Conference Reviewer:

- Causal Learning and Reasoning (CLeaR) 2023
- International Conference on Learning Representations (ICLR) 2024
- International Conference on Machine Learning (ICML) 2023, 2022, 2021,
- Conference on Neural Information Processing Systems (NeurIPS) 2023, 2022, 2021

TEACHING

- Guest Lecturer: Human AI Interaction (Fall 2023). Instructor: Haiyi Zhu
- Teaching Assistant: Algorithms and Data Structures (Fall 2020). Instructor: Carl Sturtivant