Trung Dang



Education

- 08/2023 **Ph.D., Computer Science**, *The University of Texas at Austin*, Austin, TX, Advisor: Shuchi Chawla Now Research Interest: Theory, with a focus on Mechanism Design and Prophet Inequality.
- 08/2019 B.Sc., Computer Science, Purdue University, West Lafayette, IN
 - 05/2023 Coursework: Randomized Algorithm. Algorithmic Economics. Intro to Artificial Intelligence. Machine Learning.

Publications and Manuscripts

Publications

- [1] Shuchi Chawla, **Trung Dang**, Zhiyi Huang, and Yifan Wang. Multi-unit combinatorial prophet inequalities. In *International Conference on Web and Internet Economics*, 2025.
- [2] Shuchi Chawla, Dimitris Christou, and **Trung Dang**. Commitment gap via correlation gap. In *International Conference on Web and Internet Economics*, 2025.
- [3] **Trung Dang** and Zhiyi Huang. Robust max selection. In *Proceedings of the 2025 IEEE International Symposium on Information Theory*. IEEE, 2024.
- [4] Shuchi Chawla, Dimitris Christou, **Trung Dang**, Zhiyi Huang, Gregory Kehne, and Rojin Rezvan. A multi-dimensional online contention resolution scheme for revenue maximization. In *Proceedings of the 2024 Annual ACM-SIAM Symposium on Discrete Algorithms (SODA)*, pages 1641–1668. SIAM, 2024.
- [5] **Trung Dang**, Jasper Lee, Maoyuan 'Raymond' Song, and Paul Valiant. Optimality in mean estimation: Beyond worst-case, beyond sub-gaussian, and beyond $1 + \alpha$ moments. In *Advances in Neural Information Processing Systems*, volume 36, pages 4150–4176. Curran Associates, Inc., 2023.
- [6] Zitao Li, Trung Dang, Tianhao Wang, and Ninghui Li. Mgd: A utility metric for private data publication. In *Proceedings of the 8th International Conference on Networking, Systems and Security*, NSysS '21, pages 106–119, New York, NY, USA, 2021. Association for Computing Machinery.

Manuscripts

- [7] **Trung Dang**, Walter McKelvie, Paul Valiant, and Hongao Wang. Improving pearson's chi-squared test: hypothesis testing of distributions—optimally. *arXiv preprint arXiv:2310.09408*, 2023.
- [8] Kamyar Azizzadenesheli, **Trung Dang**, Aranyak Mehta, Alexandros Psomas, and Qian Zhang. Reward selection with noisy observations. *arXiv preprint arXiv:2307.05953*, 2023.

Industry Experience

- 05/2022 **Software Engineer Intern**, *Meta*, Seattle, WA
 - 08/2022 O Performed migration of an important internal data streaming service to a new framework.
 - Implemented additional features to integrate the streaming service more smoothly into the new framework.

Scholarships & Awards

- 2022 Honorable Mention for the CRA Outstanding Undergraduate Researcher Awards 2023.
- 2022 20th place at ICPC World Finals 2021.
- 2024 31st place at ICPC World Finals 2023.
- 2021 First Prize Winner of the NIST "A Better Meter Stick for Differential Privacy" competition.

Teaching

Fall'24 - Now C S 331: Algorithms and Complexity, Teaching Assistant, UT Austin

Fall'23 - C S 375: Compilers, Teaching Assistant, UT Austin

Spring'24