

Yu Huang

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Education

- 08/2023 – present **University of Pennsylvania**, Philadelphia, PA
Department of Statistics and Data Science, Wharton School
Ph.D. in Statistics
- 08/2020 – 06/2023 **Tsinghua University**, Beijing, China
Institute for Interdisciplinary Information Sciences (IIIS)
M.S. in Computer Science
- 08/2016 – 06/2020 **Tsinghua University**, Beijing, China
Department of Mathematical Sciences
B.S. in Mathematics

Research Interests

Foundations Models, Deep Learning Theory, Non-Convex Optimization

Publications & Preprints

Preprints

- P1. **Y. Huang**, Y. Cheng, Y. Liang. “In-Context Convergence of Transformers.” *arXiv:2310.05249*, October 2023.

Journal Articles

- J1. **Y. Huang***, Y. Cheng*, Y. Liang and L. Huang. “Online Min-max Problems with Non-convexity and Non-stationarity.” *Transactions on Machine Learning Research*, July 2023.

Conference Papers

- C1. **Y. Huang**, Y. Liang and L. Huang. “Provable Generalization of Overparameterized Meta-learning Trained with SGD.” *Neural Information Processing Systems (NeurIPS)*, December 2022 (**Spotlight presentation, Top 5.2%**).
- C2. **Y. Huang**, J. Lin, C. Zhou, H. Yang and L. Huang. “Modality Competition: What Makes Joint Training of Multi-modal Network Fail in Deep Learning? (Provably).” *International Conference on Machine Learning (ICML)*, July 2022.
- C3. **Y. Huang***, C. Du*, Z. Xue, X. Chen, H. Zhao and L. Huang. “What Makes Multi-modal Learning Better than Single (Provably).” *Neural Information Processing Systems (NeurIPS)*, December 2021.
- C4. **Y. Huang** and L. Huang. “Heavy Traffic Analysis of Approximate Max-Weight Matching Algorithms for Input-Queued Switches.” *International Symposium on Computer Performance, Modeling, Measurements and Evaluation (Performance)*, November 2020.

Teaching Experience

Tsinghua University

Stochastic Network Optimization Theory, TA
Calculus B(1), Instructor & TA

Spring 2022
Fall 2020

Industry Experience

08/2021 – 01/2022 **DAMO Academy, Alibaba Group**, *Research Intern*

Honors& Awards

Outstanding Master Graduate Award (Top 2%) by Tsinghua University, 2023

Outstanding Master Thesis Award by Tsinghua University, 2023

Elite First Class Scholarship by Tsinghua University, 2022

Huiyan Talent Scholarship by Tsinghua University, 2021

Academic Service

Conference Reviewer

UAI 2021, 2023; CDC 2021; NeurIPS 2023; ICLR 2024

Journal Reviewer

TPAMI

Updated October 2023