

Chutong Yang

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Research Interests

Learning theory and algorithm design, with a particular focus on the following topics:

Trustworthy machine learning (calibration, algorithmic fairness, differential privacy), optimization. Recently, on uncertainty quantification for LLM, LLM for math, and LLM agents.

Education

The University of Texas at Austin, Ph.D. in Computer Science Aug 2023 – Present

- Supported by **Amazon AI PhD fellowship**
- Coursework: Continuous Algorithms, Stochastic Processes

Stanford University, M.S. in Computer Science Sep 2021 – Jun 2023

- Full financial support for two years.
- Coursework: Machine Learning Theory, Optimization Algorithms, Deep Generative Models

University of California, San Diego, B.S. in Computer Science and Math Sep 2016 – Jun 2020

- Overall GPA 3.944/4.0 CSE Major GPA: 3.98/4.0 Math Major GPA: 4.0/4.0
- Coursework: Real Analysis series, Abstract Algebra series, Number Theory series, Unsupervised Learning, Algorithms for Big Data, Expander Graphs and High-Dimensional Expanders

Publications

(The authors are ordered alphabetically if no * mentioned)

11. Optimal Recalibration of an Online Predictor In submission 2026

Lunjia Hu, Kevin Tian, *Chutong Yang*

<https://arxiv.org/abs/2607.19689>

10. Simultaneous Blackwell Approachability and Applications to Multiclass Omniprediction COLT 2026

Lunjia Hu, Kevin Tian, *Chutong Yang*

<https://arxiv.org/abs/2602.17577>

9. Spherical Leech Quantization for Visual Tokenization and Generation CVPR 2026

Yue Zhao*, Hanwen Jiang, Zhenlin Xu, *Chutong Yang*, Ehsan Adeli, Philipp Krähenbühl

<https://arxiv.org/abs/2512.14697>

8. Anonymous Proportionality with Incomplete Votes In Submission 2026

Zhiyi Huang, Gregory Kehne, *Chutong Yang*

AAMAS 2026 Extended Abstract

7. Private Geometric Median in Nearly-Linear Time NeurIPS 2025

Syamantak Kumar, Daogao Liu, Kevin Tian, *Chutong Yang*

TPDP 2025 Workshop

<https://arxiv.org/abs/2505.20189>

6. Omnipredicting Single-Index Models with Multi-Index Models STOC 2025

Lunjia Hu, Kevin Tian, *Chutong Yang*

<https://arxiv.org/abs/2411.13083>

5. Testing Calibration in Nearly-Linear Time NeurIPS 2024

Lunjia Hu, Arun Jambulapati, Kevin Tian, *Chutong Yang*

<https://arxiv.org/abs/2402.13187>

4. Omnipredictors for Constrained Optimization

ICML 2023

Lunjia Hu, Inbal Livni-Navon, Omer Reingold, *Chutong Yang*

<https://arxiv.org/abs/2209.07463>

3. Active Learning Polynomial Threshold Functions

NeurIPS 2022

Omri Ben-Eliezer, Max Hopkins, *Chutong Yang*, Hantao Yu

<https://arxiv.org/abs/2201.09433>

2. A Fast Exact Algorithm for Deployment of Sensor Nodes for Internet of Things

ISF 2022

Qinghua Zheng*, *Chutong Yang*, Haijun Yang, Jianhe Zhou

Information Systems Frontiers: <https://link.springer.com/article/10.1007/s10796-018-9890-3>

1. Detailed placement for IR drop mitigation by power staple insertion in sub-10nm VLSI

DATE 2019

Sun ik Heo, Andrew B Kahng, Minsoo Kim, Lutong Wang, *Chutong Yang*

<https://ieeexplore.ieee.org/abstract/document/8715096>

Teaching and Research Experiences

Teaching Experience

- CS 395T Continuous Algorithms at UT Austin *Spring 2025*
- CS 353 Theory of Computation at UT Austin *Spring 2024*
- CS 109 Probability for Computer Scientists at Stanford *Spring 2023*
- CS 161 Design and Analysis of Algorithms at Stanford *Fall 2021*
- CSE 101 Design and Analysis of Algorithms at UCSD *Spring 2020, Winter 2021, Spring 2021*
- CSE 12 Basic Data Structure at UCSD *Fall 2017*

Research Experience

- Research Assistantship with funding from Prof. **Omer Reingold** *Winter 2022-Winter 2023*
- Research Assistantship with funding from Prof. **Aaron Sidford** *Summer 2022*

PROFESSIONAL SERVICE

Conference reviewer: NeurIPS 2024, ICLR 2025, ICML 2025, ITCS 2026

SKILLS

Languages and Tools: Python, Java, C++, Matlab, Pytorch, verl