

Jiong Yang

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Education

- Present **Georgia Institute of Technology** – Atlanta, USA
PhD in Computer Science
Advisor: Kuldeep S. Meel
- 2016 – 2020 **Xi'an Jiaotong University** – Xi'an, China
BEng in Computer Science (Honors)
GPA: 4.02 / 4.3, Rank: 1 / 31.

Research Interest

My research advances automated reasoning from both theoretical and practical perspectives, with a focus on developing scalable, trusted, and practical automated reasoning techniques.

- Keyword Model counting, satisfiability, verification of neural networks.

Honor and Award

- 2025 SAT Best Student Paper Runner-Up Award
- 2024 SAT Best Student Paper Runner-Up Award
- 2024 1st place in All Tracks of Model Counting Competition
- 2024 CAV Distinguished Paper Award
- 2023 CAV Distinguished Paper Award
- 2021-2024 President's Graduate Fellowship
Highest university fellowship for graduate students
- 2019-2020 Top Undergraduate Scholarship
Highest university scholarship for undergraduates
- 2018 ACM-ICPC Asia Regional Contest Silver Medal
- 2017-2019 National Scholarship
China's highest national honor for undergraduates

Publication

- 2025 **Towards Real-Time Approximate Counting**
Yash Pote ^④ Kuldeep S. Meel ^④ Jiong Yang.
Annual AAAI Conference on Artificial Intelligence (AAAI) [Oral]
④ random order
- 2025 **Efficient Certified Reasoning for Binarized Neural Networks**
Jiong Yang, Yong Kiam Tan, Mate Soos, Magnus O. Myreen, and Kuldeep S. Meel.
International Conference on Theory and Applications of Satisfiability Testing (SAT)
Best Student Paper Runner-Up Award
- 2024 **Quantum Circuit Mapping Based on Incremental and Parallel SAT Solving**
Jiong Yang, Yaroslav A. Kharkov, Yunong Shi, Marijn Heule, and Bruno Dutertre.
International Conference on Theory and Applications of Satisfiability Testing (SAT)
Best Student Paper Runner-Up Award
- 2024 **Formally Certified Approximate Model Counting**
Yong Kiam Tan*, Jiong Yang*, Mate Soos, Magnus O. Myreen, and Kuldeep S. Meel.
International Conference on Computer Aided Verification (CAV)
* equal contribution
Distinguished Paper Award
- 2023 **Rounding Meets Approximate Model Counting**
Jiong Yang and Kuldeep S. Meel.
International Conference on Computer Aided Verification (CAV)
Distinguished Paper Award
- 2023 **Explaining SAT Solving Using Causal Reasoning**
Jiong Yang, Arijit Shaw, Teodora Baluta, and Kuldeep S. Meel.
International Conference on Theory and Applications of Satisfiability Testing (SAT)
- 2022 **Projected Model Counting: Beyond Independent Support**
Jiong Yang, Supratik Chakraborty, and Kuldeep S. Meel.
International Symposium on Automated Technology for Verification and Analysis (ATVA)
- 2021 **Engineering an Efficient PB-XOR Solver**
Jiong Yang and Kuldeep S. Meel.
International Conference on Principles and Practice of Constraint Programming (CP)

2020 **Learning Formatting Style Transfer and Structure Extraction for Spreadsheet Tables with a Hybrid Neural Network Architecture**
Haoyu Dong, Jiong Yang, Shi Han, and Dongmei Zhang.
International Conference on Information and Knowledge Management (CIKM)

Talk

- Conference talk SAT 2025, AAAI 2025, SAT 2024, CAV 2023, SAT 2023, ATVA 2022, CP 2021.
- Workshop talk Counting, Sampling, and Synthesis 2025; Explanations with Constraints and Satisfiability 2025; Counting, Sampling, and Synthesis 2024; Counting and Sampling 2023.
- Feb 2025 **Scalable and Trustworthy Approximate Counting**
Georgia Tech PLSE Seminar, Atlanta, USA.
- Dec 2024 **Quantum Circuit Mapping Based on Incremental and Parallel SAT Solving**
SG Programming Languages Summit, Singapore.
- Apr 2024 **Formally Certified Approximate Model Counting**
UoT Modeling seminar, Toronto, Canada.
- Aug 2023 **Rounding Meets Approximate Model Counting**
NUS PLSE seminar, Singapore.
- Apr 2023 **Explaining SAT Solving Using Causal Reasoning**
Extended Reunion: Satisfiability, Simons Institute, UC Berkeley, USA.

Experience

- Summer 2025 **Nanyang Technological University** – Singapore
Visiting Graduate Student
- Summer 2024 **Amazon Web Services** – San Francisco Bay Area, USA
- Summer 2023 Applied Scientist Intern in Automated Reasoning Group
- Summer 2022 Manager: Bruno Dutertre
- Spring 2024 **University of Toronto** – Toronto, Canada
Visiting Graduate Student
- Spring 2023 **Simons Institute** – UC Berkeley, USA
Visiting Graduate Student in Extended Reunion: Satisfiability
- Summer 2019 **Microsoft Research** – Beijing, China
Research Intern in Data Knowledge Intelligence Group
Mentor: Haoyu Dong

Teaching Experience

Georgia Institute of Technology – Atlanta, USA

Teaching Assistant

Fall 2025 Automata and Complexity (CS4510)

National University of Singapore – Singapore

Teaching Assistant

Spring 2023 Knowledge Representation and Reasoning (CS4244)

Fall 2021 Introduction to Artificial Intelligence (CS3243)

Xi'an Jiaotong University – Xi'an, China

Teaching Assistant

Fall 2019 Programming Fundamentals

Service

Artifact Evaluation Committee: CAV 2025, TACAS 2025, CAV 2024, TACAS 2024.

Reviewer: AAAI 2026, NeurIPS 2025, ICML 2025, AISTATS 2025, ICLR 2025, CP 2024,
NeurIPS 2024, NeurIPS 2023, CAV 2023, SAT 2023, NeurIPS 2022.

Webmaster: [SAT 2022](#).