

# Jiong Yang

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## Education

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

## 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.
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## Honor and Award

2024	CAV Distinguished Paper Award
2023	CAV Distinguished Paper 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
2021-2024	President's Graduate Fellowship <i>Highest university fellowship for graduate students</i>
2019-2020	Top Undergraduate Scholarship <i>Highest university scholarship for undergraduates</i>
2018	ACM-ICPC Asia Regional Contest Silver Medal
2017-2019	National Scholarship <i>China's highest national honor for undergraduates</i>

## Publication

- 2023 **Rounding Meets Approximate Model Counting**  
Jiong Yang and Kuldeep S. Meel.  
*International Conference on Computer Aided Verification (CAV)*  
**Distinguished Paper 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**
- 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**
- 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**
- 2025 **Towards Real-Time Approximate Counting**  
Yash Pote Ⓜ Kuldeep S. Meel Ⓜ Jiong Yang.  
*Annual AAAI Conference on Artificial Intelligence (AAAI) [Oral]*  
Ⓜ random order
- 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](#).