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.

Honor and Award

2025 SAT Best Student Paper Runner-Up Award

2024 SAT Best Student Paper Runner-Up Award

2024 CAV Distinguished Paper Award

2023 CAV Distinguished Paper Award

2021-2024 President's Graduate Fellowship

2019-2020 Undergraduate Special Scholarship

2018 ACM-ICPC Asia Regional Contest Silver Medal

2017-2019 National Scholarship

Publication

2025 **Towards Real-Time Approximate Counting**
Yash Pote ⓡ Kuldeep S. Meel ⓡ Jiong Yang.
Annual AAAI Conference on Artificial Intelligence (AAAI) [Oral]
ⓡ 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

Aug 2025 **Efficient Certified Reasoning for Binarized Neural Networks**
SAT 2025, Glasgow, Scotland.

Aug 2025 **Towards Real-Time Approximate Counting**
Workshop on Counting, Sampling, and Synthesis 2025, Glasgow, Scotland.

Aug 2025 **Explaining SAT Solving Using Causal Reasoning**
Workshop on Explanations with Constraints and Satisfiability, Glasgow, Scotland.

Mar 2025	**Towards Real-Time Approximate Counting** AAAI 2025, Philadelphia, USA.
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.
Aug 2024	**Quantum Circuit Mapping Based on Incremental and Parallel SAT Solving** SAT 2024, Pune, India.
Aug 2024	**Formally Certified Approximate Model Counting** Workshop on Counting, Sampling, and Synthesis 2024, Pune, India.
Apr 2024	**Formally Certified Approximate Model Counting** UoT Modeling seminar, Toronto, Canada.
Aug 2023	**Rounding Meets Approximate Model Counting** NUS PLSE seminar, Singapore.
Jul 2023	**Rounding Meets Approximate Model Counting** CAV 2023, Paris, France.
Jul 2023	**Explaining SAT Solving Using Causal Reasoning** SAT 2023, Alghero, Italy.
Jul 2023	**Rounding Meets Approximate Model Counting** Workshop on Counting and Sampling 2023, Alghero, Italy.
Apr 2023	**Explaining SAT Solving Using Causal Reasoning** Extended Reunion: Satisfiability, Simons Institute, UC Berkeley, USA.
Oct 2022	**Projected Model Counting: Beyond Independent Support** ATVA 2022, Beijing, China.
Oct 2021	**Engineering an Efficient PB-XOR Solver** CP 2021, Montpellier, France.

Experience

Summer 2025	**Nanyang Technological University** – Singapore Visiting Graduate Student
Summer 2024 Summer 2023 Summer 2022	**Amazon Web Services** – San Francisco Bay Area, USA Applied Scientist Intern in Automated Reasoning Group 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.