Jiong Yang

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Education

Present — **National University of Singapore** – Singapore
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.

Publications

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)

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)

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)

2023 — **Rounding Meets Approximate Model Counting**
Jiong Yang and Kuldeep S. Meel.
International Conference on Computer Aided Verification (CAV)
Distinguished Paper Award

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)

Talks

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.

Honors and Awards

2023 CAV Distinguished Paper Award

2021 President's Graduate Fellowship

2020 Outstanding Graduates

2019 Undergraduate Special Scholarship

2018 ACM-ICPC Asia Regional Contest Silver Medal

2017 National Scholarship

Experience

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

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 2024, TACAS 2024.

Reviewer: CP 2024, NeurIPS 2024, NeurIPS 2023, CAV 2023, SAT 2023, NeurIPS 2022.

Webmaster: SAT 2022 and Meel Group.