

Jiong Yang

jiong@comp.nus.edu.sg • <https://al-jiongyang.github.io/>

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)
* equal contribution
- 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.