

# 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)*  
**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     **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

- 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.

## Honors and Awards

- 2024 SAT Best Student Paper Runner-Up Award
- 2024 & 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  
2018 & 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:** ICLR 2024, CP 2024, NeurIPS 2024, NeurIPS 2023, CAV 2023, SAT 2023, NeurIPS 2022.

**Webmaster:** SAT 2022 and Meel Group.