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

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
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.