

Jialiang Sun

 [LinkedIn](#) |  [Google Scholar](#) |  sjl@cs.toronto.edu

SUMMARY

I am a Ph.D. student in Computer Science at the University of Toronto, supervised by Prof. Kuldeep Meel. My primary research interest is automated reasoning, which lies at the intersection of AI and formal methods. I develop neurosymbolic frameworks for automated theorem proving, autoformalization, and constrained generation by synergizing symbolic methods and LLMs. In the long term, my goal is to automate research-level discovery in mathematics and theoretical computer science without human intervention.

EDUCATION

Doctor of Philosophy, Computer Science 2023.09 - 2028.09 (Expected)

- University of Toronto, Canada
- Supervisor: [Kuldeep Meel](#)
- Committee Members: [Colin Raffel](#), [Chris Maddison](#)
- Area of Interest: Automated Reasoning, Formal Methods, Large Language Models

Honours Bachelor of Science, Computer Science 2021.09 - 2023.06

- University of Toronto, Canada
- Area of Study: Computer Science (Major), Mathematics and Statistics (Minor).
- Cumulative GPA: 3.99/4.00, Major GPA: 4.00/4.00
- Dean's List Scholar for 2021-2023 academic terms.

High School 2018.09 - 2021.06

- White Oaks Secondary School, Canada

AWARDS

Ontario Graduate Scholarship (OGS) 2024-2026

- OGS is a merit-based scholarships to Ontario's best graduate students in all disciplines of academic study with a value of CA\$15,000 for one year.

SELECTED PUBLICATIONS

[Autoformalizing Euclidean Geometry](#) ICML 2024

Logan Murphy*, Kaiyu Yang*, [Jialiang Sun](#), Zhaoyu Li, Anima Anandkumar, Xujie Si
International Conference on Machine Learning, 2024

[A Survey on Deep Learning for Theorem Proving](#) COLM 2024

Zhaoyu Li, [Jialiang Sun](#), Logan Murphy, Qidong Su, Zenan Li, Xian Zhang, Kaiyu Yang, Xujie Si
Conference on Language Modeling, 2024

[PyEuclid: A Versatile Formal Plane Geometry System in Python](#) CAV 2025

Zhaoyu Li*, Hangrui Bi*, [Jialiang Sun](#)*, Zenan Li, Kaiyu Yang, Xujie Si
International Conference on Computer Aided Verification, 2025

Formally Solving Answer Construction Problems in Lean

LPAR 2026

Jialiang Sun, Yuzhi Tang, Ao Li, Chris Maddison, Kuldeep Meel

International Conference on Logic for Programming, Artificial Intelligence and Reasoning, 2026

DreamProver: Evolving Transferable Lemma Libraries via a Wake-Sleep Theorem-Proving Agent

COLM 2026

Youyuan Zhang*, Jialiang Sun*, Hangrui Bi, Chuqin Geng, Wenjie Ma, Zhaoyu Li, Xujie Si

Conference on Language Modeling, 2026

SAT-RL: Training Language Models for Logic Reason with Symblic Solvers

Under Review (2026)

Jialiang Sun, Kuldeep Meel

Preprint, Under Review by ACL ARR August (2026)

Provably Tractable NFA Constrained Language Generation

Under Review (2026)

Jialiang Sun, Kuldeep Meel

Preprint, Under Review by ACL ARR August (2026)

SERVICES

Conference Reviewer

2024.02 - Now

- Neural Information Processing Systems (NeurIPS 2024-2025)
- Transactions on Machine Learning Research (TMLR 2024-2026)
- International Conference on Learning Representations (ICLR 2025-2026)
- International Conference on Machine Learning (ICML 2025-2026)

TEACHING

Teaching Assistant

- Introduction to Databases (CSC343) 2023
- Introduction to Artificial Intelligence (CSC384) 2024, 2025, 2026