

Logan Murphy | Curriculum Vitae

Toronto – Canada

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Education

Doctor of Philosophy University of Toronto, Department of Computer Science Supervisor: Marsha Chechik. <i>Expected completion: January 2026</i>	2022–Present
Master of Science University of Toronto, Department of Computer Science Supervisor: Marsha Chechik	2020–2022
Bachelor of Science with First Class Honours Saint Francis Xavier University, Department of Computer Science	2016–2020

Selected Publications

Conference Proceedings
◦ Logan Murphy , Torin Viger, Alessio Di Sandro, and Marsha Chechik. <i>PLACIDUS: Engineering Product Lines of Rigorous Assurance Cases</i> . iFM 2024. [Best Paper Award]
◦ Logan Murphy* , Kaiyu Yang*, Jialiang Sun, Zhaoyu Li, Anima Anandkumar, and Xujie Si. <i>Autoformalizing Euclidean Geometry</i> . ICML 2024.
Journal Articles
◦ Torin Viger, Logan Murphy , Alessio Di Sandro, Claudio Menghi, Ramy Shahin, and Marsha Chechik. <i>The ForeMoSt Approach to Building Valid Model-based Safety Arguments</i> . SoSyM 2023.
<i>For a complete list of my co-authored publications, please refer to my Google Scholar profile.</i>

Teaching Assistantships

Enriched Introduction to the Theory of Computing (CSC240)	5 Appointments (2021 - 2025)
Topics in Programming Languages: Types and Effects (CSC2126)	1 Appointment (2024)
Introduction to the Theory of Computing (CSC236)	4 Appointments (2021 - 2024)
Software Testing and Verification (CSC410)	3 Appointments (2020 - 2023)
<i>All TAs held at the University of Toronto</i>	

Professional Experience

Software Engineering Intern CertiK, LLC	May – Sept 2022
◦ Developed improvements to symbolic model checking tool to accommodate nonlinear arithmetic in smart contracts under audit	
◦ Conducted preliminary study to compare alternative verification strategies and theorem provers	
◦ Coordinated with smart contract auditors to align tool design priorities	

* Equal contribution.