

Todd Schmid

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EDUCATION

Sep. 2019 to Present	University College London Intended Graduate Program: Doctor of Philosophy in Computer Science
Sep. 2018 to May 2019	University of Toronto Master of Science in Mathematics
Sep. 2013 to June 2018	University of Victoria Honours Bachelor of Science in Mathematics

TEACHING EXPERIENCE

Jan. 2020 to present	Teaching Assistant at the UNIVERSITY COLLEGE LONDON COURSE TITLE: DISCRETE MATHS FOR COMPUTER SCIENCE (COMP0147) COURSE TITLE: COMPUTABILITY AND COMPLEXITY THEORY (COMP0017) I lead problem sessions every week for students.
Sep. 2018 to May 2019	Teaching Assistant at the UNIVERSITY OF TORONTO COURSE TITLE: CALCULUS (MAT 137) I led two interactive tutorials, graded problem sets, and invigilated exams.
Sep. 2016 to May 2018	Teaching Assistant at the UNIVERSITY OF VICTORIA COURSE TITLES: CALCULUS I (MATH 100), PRECALCULUS (MATH 120), CALCULUS III (MATH 200) I led interactive tutorials, graded problem sets, and invigilated quizzes.
Sep. 2016 to May 2018	Assistance Centre Tutor at the UNIVERSITY OF VICTORIA I was an official tutor for the math and stats assistance center.

PUBLICATIONS

2021	<i>How to Write a Coequation</i> Appeared in CONFERENCE ON ALGEBRA AND COALGEBRA IN COMPUTER SCIENCE.
2021	<i>On Star Expressions and Completeness theorems</i> Appeared in MATHEMATICAL FOUNDATIONS OF PROGRAMMING SEMANTICS.
2021	<i>Guarded Kleene Algebra with Tests: Coequations, Coinduction, and Completeness</i> Appeared in INTERNATIONAL COLLOQUIUM ON AUTOMATA, LANGUAGES, AND PROGRAMMING
2019 Vol. 65 Issue 4	<i>Concrete barriers to quantifier elimination in finite dimensional C^*-algebras</i> Appeared in MATHEMATICAL LOGIC QUARTERLY Coauthored with Christopher Eagle. Supported by a Jamie Cassels Undergraduate Research Award at the University of Victoria.

PAST PROJECTS

May 2017 to Aug. 2017	Undergraduate Summer Research , funded by the NSERC USRA at the UNIVERSITY OF VICTORIA Investigated the connection between algebraic number theory and discrete dynamical systems. In particular, the direct correspondance between hyperbolic toral automorphisms and the unit group of an algebraic number field.
May 2016 to Jul. 2016	Undergraduate Summer Research at the UNIVERSITY OF VICTORIA Used Bratteli diagrams to construct dense ordered subgroups of $\mathbb{Q} \oplus \mathbb{Q}$ which satisfy certain interpolation properties. Discussed possible connections with AF algebras.

AWARDS

2018	Boehm Family Award for Excellence in Science. Awarded to a select group of students in the honours program in the faculty of science at the University of Victoria.
2017	Jamie Cassels Undergraduate Research Award. Funding for my undergraduate research with Dr. Christopher Eagle. UVic Mathematics and Statistics Scholarship President's Scholarship Undergraduate Student Research Award (USRA). Awarded by the Natural Sciences and Engineering Research Council of Canada (NSERC) to fund undergraduate summer research projects.

TALKS

Mar. 2020	PPLV Group Seminar hosted by the UCL Talk: <i>Guarded Kleene Algebra with Tests: Coequations, Coinduction, and Completeness.</i> A presentation on recently completed joint work with Tobias Kappé, Dexter Kozen, and Alexandra Silva. Accompanying paper submitted to ICALP 2021.
Aug. 2019	Toronto Set Theory Seminar hosted by the FIELDS INSTITUTE Talk: <i>Topos Theory and the Independence of the Continuum Hypothesis.</i> A presentation introducing the research group to the Cohen topos and other examples of the relationship between sheaves and forcing in set theory.
Nov. 2018	University of Toronto Graduate Student Seminar hosted by THE UNIVERSITY OF TORONTO, ST. GEORGE CAMPUS Talk: <i>A Brief Survey of Modal Logic.</i> A survey of the applications of modal logic to topology, the proof theory of arithmetic, and forcing in set theory.
Jul. 2017	Canadian Undergraduate Mathematics Conference hosted by UQÁM, CONCORDIA, and the UNIVERSITÉ DE MONTRÉAL Talk: <i>A Tale of Two Models.</i> A presentation of Vaught's Two Model theorem.
Jan. 2017	Séminaires universitaires en mathématiques à Montréal hosted by MCGILL, and the UNIVERSITÉ DE MONTRÉAL Talk: <i>A Fixed-Point Theorem from Logic.</i> A presentation of Lisa Reidhaar-Olsen's Modal Fixed-point Theorem.

VOLUNTEERING AND COMMUNITY ENGAGEMENT

September 2020 to Present	London Maths Outreach DIRECTOR
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May 2017 to May 2018	Undergraduate Math and Stats Course Union (SUMS) CO-PRESIDENT
Jul. 2008 to Sep. 2014	2016 Canadian Undergraduate Mathematics Conference WEB DEVELOPER, ORGANIZER

REFERENCES

PROF. ALEXANDRA SILVA
UNIVERSITY COLLEGE LONDON

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ification Group
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