

Brendan Michael Steed

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Education

Master of Science in Mathematics, University of Victoria, 2023

Supervisor(s): Dr. Heath Emerson & Dr. Ian Putnam
(Anticipate completion and defence of thesis by August, 2023)

Bachelor of Science in Honours Mathematics, University of Victoria, 2021

Supervisor(s): Dr. Jane Ye

Employment, University of Victoria

Sessional Instructor

Sept. 2022 - present

University of Victoria sessional instructor. Duties include delivering all lectures, creating and grading assignments, midterm exams, quizzes, and final exams, as well as holding office hours and being available for contact by students. See table below for details.

<u>Course Number:</u>	<u>Course Title:</u>	<u>Employment Duration:</u>	<u>Number of Sections:</u>
Math 122	Logic and Foundations	Jan. 2023 - Apr. 2023	1
Math 110	Matrix Algebra for Engineers	Sept. 2022 - Dec. 2022	1

Teaching Assistant

Jan. 2020 - Aug. 2022

University of Victoria teaching assistant. Duties included delivering the University's "Getting Ready for Calculus" lecture series, delivering weekly calculus tutorials (multiple sections per semester), tutoring all first and second year UVic mathematics courses with the MSAC (Mathematics & Statistics Assistance Centre), and providing guidance and leadership as the MSAC's head department tutor. See below for details regarding position, employment duration, and description.

<u>Position:</u>	<u>Employment Duration:</u>	<u>Employment Description:</u>
Special Position	Aug. 2022 - Sept. 2022	Getting Reading for Calculus lecture series.
Tutorial Instructor	Sept. 2021 - Aug. 2022	(2 – 3) tutorial sections of Calculus II-IV.
Head Department Tutor	Jan. 2022 - Apr. 2022	Senior tutor serving as instructional leadership.
Department Tutor	Jan. 2021 - Dec. 2021	Assisted with all first/second year math courses.
Grader	Jan. 2020 - Aug. 2022	Miscellaneous courses.
Exam Invigilator	Jan. 2020 - Aug. 2022	Miscellaneous courses.

Research Assistant

April 2019 - Aug. 2019

Supervisor(s): Dr. Jane Ye

Assisted Dr. Ye with work on bilevel optimization problems. Duties included preparing weekly presentations summarizing the results of academic papers pertaining to the work of Dr. Ye and her team, comparing regularity assumptions used by Dr. Ye and her associates in recent papers, and independent research on a problem in non-differentiable function theory.

Research Activities

Masters Thesis

Anticipate completion Aug. 2023

Title: Noncommutative Geometry of Lattice Pairs.

Supervised by Dr. Heath Emerson & Dr. Ian Putnam.

Speaker: University of Victoria Operator Algebras Seminar

Nov. 2022

Title: Rotation algebras of higher dimension and a related spectral triple

Undergraduate Honours Thesis

April 2021

Title: The Proximal Subdifferential of Marginal Functions Under Second Order Assumptions.

Supervised by Dr. Jane Ye.

Other Employment and Volunteering

Vice President: Students in Graduate Mathematics and Statistics *Sept. 2021 - present*

The University of Victoria's Student group, SIGMAS (Students in Graduate Mathematics and Statistics) serves to advocate on behalf of Mathematics and Statistics graduate students during any and all decision making processes, as well as the organization of social and academic events. Vice president position held since July 2022.

UVic: Student Mentorship in Mathematics and Statistics

Sept. 2021 - present

Volunteer mentor with the University of Victoria's Student Mentorship in Mathematics and Statistics program. Non-credit program aiming to pair undergrads with grad mentors of similar mathematical or statistical interests. Opportunity for one-on-one guidance, direction, or mentorship. The nature of each arrangement decided by individual pairs and can involve, for example: Support or advice regarding academic, career, or personal development; directed academic projects; or supervision in research-level work.

Volunteer Graduate Seminar Mentor

Sept. 2021 - Dec. 2021

Volunteer mentor/advisor to UVic graduate students taking the mandatory graduate seminar course, Math 585, which teaches UVic graduate students important skills such as how to write an academic paper and how to give an academic presentation. Selected for the position Dr. Kieka Mynhardt due to skills acquired while writing an undergraduate honours thesis at UVic. Duties include helping graduate students with \LaTeX , Beamer, listening to them practice talks, critiquing presentations, etc.

UVic: Students in Undergraduate Mathematics and Statistics

Sept. 2017 - April 2021

Active member of the University of Victoria's student group SUMS (Students in Undergraduate Mathematics and Statistics). Group serves as a voice for undergraduates in the department, and organizes academic and social events. Volunteer activities contributed include representing SUMS at a bi-annual UVic Club Day, attending funding meetings to ensure SUMS continues to be recognized by the university, and recruiting new members by being vocal in the community.

Explore UVic Volunteer

Feb. 2019

Volunteered to represent the Mathematics and Statistics Department at the annual Explore UVic recruitment event aimed towards graduating highschool students.

Service Industry: Fine Dining

Jan. 2015 - April. 2019

In charge of all front of house affairs at Ginza Sushi (in Penticton, British Columbia) prior to a kitchen fire closing the restaurant July 2017. Hired as a server at Front Street Brasserie and Lee's overseas shortly after the closure of Ginza. Continued at Front Street Brasserie and Lee's Overseas during Summers away from UVic until Summer 2019 so as to research under Dr. Jane Ye.

Awards and Honours

J.J.E.M. Graduate Award in Mathematics and Statistics

Dec. 2022

Recommended by the Department of Mathematics and Statistics for a scholarship of \$875 from the Faculty of Graduate studies.

University of Victoria Graduate Award

Aug. 2022

Recommended by the Department of Mathematics and Statistics for a scholarship of \$3,500 from the Faculty of Graduate Studies.

Teaching Assistant Recognition Award ×3

April 2021, April 2022

Awarded for supervisor recognition of an exceptional teaching assistant who made an extraordinary contribution to the teaching mission of the Department of Mathematics and Statistics. Received Spring 2021, and Spring 2022, working as a tutor, and head tutor, respectively, in the Mathematics and Statistics Assistance Centre. Also received Spring 2022 working as a Calculus III tutorial instructor.

Completed UVic B.Sc. with Honours and Distinction

April 2021

Graduated from the University of Victoria's Honours Mathematics B.Sc. program with distinction. Honours awarded for completion of a more math intensive program focus than UVic's regular Bachelor of Science in Mathematics program. Distinction awarded for completion of the degree with an overall GPA in the top 20% of Mathematics and Statistics Department undergraduates.

UVic Transfer Scholarship

Sept. 2017

Transfer scholarship awarded by the University of Victoria for academic excellence maintained while attending Okanagan College.

Dean's List: Okanagan College

Dec. 2016, April 2017

Dean's List Award recipient Fall 2016 and Spring 2017 while attending first year post-secondary studies at Okanagan College. Awarded bi-annually for maintaining an average of above 85% across all courses during a semester.

Bill Durick Memorial Award

Dec. 2016

Awarded annually to one student from Penticton Secondary School.

Skills

L^AT_EX

Have been writing assignments exclusively in L^AT_EX for four years. Extremely comfortable with the language.

Computer Programming Languages

Proficient in Python, good with Java and Markdown. Can become versed in any languages requested.

Communication and Teaching

Excellent communication skills nursed by experiences as an instructor, teaching assistant, and service industry worker. Known by peers for always being willing and happy to assist with the understanding of course content, and for providing said assistance in a clear and concise manner.

Interests and Hobbies

University of Victoria Lacrosse Club

Jan. 2023 - present

Starting goaltender, and active social member, of the University of Victoria's Lacrosse Club. Currently, the club plays in the Victoria Men's Field Lacrosse League, with the goal being to field full fledged UVic Vikings varsity lacrosse team by 2025. Volunteer duties include representing the club at Clubs Day, and recruiting new members by being active in various UVic social groups.

Academic Interests

Currently interested in Noncommutative Geometry and KK-duality. To a lesser degree, optimization and nondifferentiable function theory is also palatable. In more generality, problems falling into genres of analysis, algebra, or geometry have been my kind, so C^* -algebras seems a nice place to end up.