Alex Kazachek

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Education

2019 – Present	**The University of Western Ontario ('UWO')**
	Honours Specialization in Mathematics, 2nd year.
	Projected concurrent Major in Data Science.
	Current average of 89.12%.

Awards

2019 School Year	**Dean's Honour Roll**
	Achieved an average of at least 80% with no failures, taking at least 4.0 courses.
Fall 2019	**Western Scholarship of Excellence**
	Had a university admission average at or above 90%, but less than 95%.
Winter 2020	**Borwein Memorial Prize**
	Finished with the highest mark in Real Analysis I (Math 2122).
Winter 2021 (on-going)	**Cecil G. Gracey Memorial Continuing Scholarship**
	Recognized as an academically-achieving second-year student in the Honours Mathematics program. Minimum 85% average required to qualify, 80% to continue.

Academics

2017 – 2018	**Advanced Placement ('AP') Credits**
	Self-studied AP Calculus AB (2017), AP Statistics (2018), and AP Physics C: Mechanics (2018).
2018 School Year	**Western's Initiative for Scholarly Excellence ('WISE')**
	One of the 100 admissions to the WISE program, enrolling in 1.0 courses at UWO concurrently with secondary school studies.
Fall 2019	**William Lowell Putnam Mathematical Competition**
	Scored 3/120, ranking 1831.5/3428.
Winter 2020	**Directed Reading Program**
	Studied manifolds and smooth maps, supervised by graduate student Udit Mavinkurve.
	Preliminary reading of excerpts from Spivak's Calculus on Manifolds, relating to differentiation and continuity in $\mathbb{R}^n$.
	Main reading of Guillemin and Pollack's Differential Topology, covering smooth maps, manifolds, submersions, and immersions.
Fall 2020	**Directed Reading Program**
	Studied the Jordan-Brouwer separation theorem, supervised by graduate student Prakash Singh.
	Main reading of Guillemin and Pollack's Differential Topology, on transversality, homotopy, manifolds with boundary, intersections, and winding numbers.
	End-of-term presentation on ideas central to the proof of the separation theorem, involving transversal intersections of rays with hypersurfaces.

Clubs & Committees

2019 School Year	**Math Club at Western ('MaCAW')** **Mathematics Secretary** Co-ran weekly problem solving sessions, teaching recreational mathematics to and solving contest problems with other undergraduate students.
2020 School Year (on-going)	**Math Club at Western ('MaCAW')** **VP Academics** Introduced biweekly mathematics contests available to all undergraduate students, and helping design and grade these contests. Introduced student seminars, an opportunity for undergraduate students to share and discuss any independent mathematical works or passions. Inviting professors and post-doctoral fellows to give "Pizza Seminars", talks for undergraduate students on mathematics not found in traditional coursework.
Summer 2020	**Canadian Undergraduate Mathematics Conference ('CUMC')** **Committee Member** Helped coordinate the conference, hosting 112 students from 22 universities and 4 countries. Organized the industry panel of past mathematics undergraduates, including two senior employees at Lyft and a graduate student in financial engineering at Columbia University. Contacted professors from universities in Canada and the United States, asked them to give and scheduled keynote lectures for the conference. Assessed and organized the technical software needed to suddenly transition the conference online, because of the Covid-19 pandemic. Created the closing ceremony slideshow and mailer.

Volunteer Experience

Dec 2015 – Feb 2017	**Stoney Creek YMCA** **Membership Sales and Services Volunteer** Led prospective members on facility tours, explaining amenities and services. Completed "Sunshine Calls", checking in with new members to answer any questions or concerns. Assisted staff, such as by answering phones or simple questions from members.
Summer 2019	**Green Party of Canada** **Student Volunteer** Participated in canvassing events for the 2019 Canadian election.
Summer 2020	**SmartStart: Academics** **Panelist** Represented MaCAW at the mathematics department meet-and-greet session. Answered questions from incoming UWO students regarding the transition from secondary school to university.

Fall 2020	**Fall Preview Day**
	Student Ambassador
	Represented the UWO mathematics department in the science faculty events.
	Answered questions from prospective students regarding mathematics courses and modules.

Work Experience

Feb 2017 – Mar 2020	**Stoney Creek YMCA**
	Membership Sales and Services Representative
	Co-ran Accounts Receivable:
	· Responsible for maintaining regular phone and email correspondences with upwards of 100 members at a time.
	· Negotiated payment plans and amounts with members to maintain both customer relations and organization goals.
	· Prior to 2019 merger, consistently had fewest arrears despite being the largest branch.
	Worked daily with members of various ages, vulnerable persons, and newcomers to Canada.
	Regularly achieved one of the highest monthly hourly sales numbers.
Summer 2018	**YMCA of Western Ontario**
	Camp Administrator
	Led Camp Accounts Receivable, and collected over $8000 in arrears within two weeks.
	Corresponded with various agencies, such as the Children's Aid Society and City of London, for invoicing, subsidy applications, and case-specific matters.
	Assessed various financial documents and worked with families one-on-one to provide tailored payments plans through YMCA's Strong Kids charity.

Skills

Programming	Coursework in **Python**, **Java**, and **C**.
	Knowledge of **HTML**, **CSS**, and **Javascript** (specifically **React**).
	Courses covering data structures, analysis of algorithms, and cryptography.
Design	Proficient in LaTeX, typesetting both text-based and mathematics-based documents.
	Knowledge of Ti*k*Z, creating plots and commutative diagrams, among other graphical figures.
	Familiar with Qualtrics, creating detailed and highly-customizable surveys.
Languages	Conversational fluency in **Russian**.
	Beginner knowledge of **Japanese**.