

Finley Bate-Smith

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Education

Queen's University | Kingston, ON

Graduation date: April 2028

Bachelor's of Applied Science in Mechanical Engineering

- CGPA: 3.48 | Major GPA: 3.88
- Dean's Honour List 2025-2026

Experience

Undergraduate Research Assistant, RMC – Kingston, ON

May 2026 – Present

- Awarded Undergraduate Student Research Award to support summer research under Dr. Lau-Chapdelaine
- Modeled an electromagnetic projectile velocity measurement system using Faraday induction from a projectile-mounted magnet passing through wire coils
- Developed Python simulations to optimize coil geometry, then designed a SolidWorks/3D-printed spool to integrate coil within projectile range constraints

Internship Coordinator, VCMT – Vancouver, BC

May 2025 – August 2025

- Scheduled 240 registered massage therapy internship students across 15 outreach locations and a student clinic with over 800 appointments per week
- Problem-solving daily by managing absences, reallocating students from one location to another, scheduling make-up shifts, and communicating with students about changes in their schedule
- Tracked student internship metrics such as the number of patients and treatment hours to determine if graduation requirements are met
- Prepared reports for management detailing student internship metrics and program scheduling efficiency

Aerodynamics Team Member, Queen's Formula SAE – Kingston, ON

September 2024 – Present

- Designed the Q26 rear wing swan-neck mounts in SolidWorks, iterating geometry through FEA analysis and reducing the added weight relative to Q25 design
- Modeled the supporting rear wing mounting rib in CATIA for integration with the team's master assembly
- Designed the Q26 car's sidepod in CATIA after relocation of the radiator, developing a new aerodynamic profile optimized for downforce and reducing drag, while complying with FSAE rulebook
- Collaborated weekly in engineering design reviews with the team lead and sub-teams to support the development of an EV race car to compete in New Hampshire and Michigan in the spring

Landscaper, Proscap Landscape – Vancouver, BC

June 2022 – August 2024

- Maintained lawns, gardens, and outdoor spaces by performing tasks such as mowing, planting, and weeding, ensuring visually appealing and healthy landscapes
- Operated and maintained equipment, including lawnmowers, blowers, trimmers, and rakes to complete tasks efficiently and safely
- Collaborated with team members to execute landscaping projects on schedule and within client specifications
- Ensured compliance with safety protocols and environmental best practices during all landscaping activities

Projects

**see portfolio for details*

Skills

Software: Solidworks, CATIA V5, ANSA, Arduino

Manufacturing: 3D Printing, MIG Welding, Manual Machining

Programming: C, Python