### EDUCATION

**Queen’s University**  
Candidate Bachelor of Computing (Honours) | Sept 2024 - May 2028, 4.2/4.3 GPA

### SKILLS

**Programing & Technology**: Python, Java, C++, HTML, CSS, SolidWorks, Fusion360, Onshape, Arduinos, MS Office, LaTeX, 3D printing, Drill press, Bandsaw

**Other**: English, French, Chinese, G-driver license

### WORK EXPERIENCE

**Web Developer for Engine Control Systems,** *Pratt & Whitney Canada,* May. 2025 – August 2025

**Lead Robotics Instructor,** *Mi3L School, Oakville, Ontario*  July. 2023 – Present

* Designed and delivered training courses on VEX robotics using Fusion 360, teaching design, building techniques, and machine operation to high school and midle school teams.
* Instructed students on robot route design with PID controller and motion algorithms with C++.

**Gymnastics Coach,** *Gymnastics Mississauga, Mississauga, Ontario* Feb. 2022 – June 2024

* Coached teens aged 12–15 in weekly gymnastics classes, designed and implemented lesson plans tailored to provincial competitive skill levels
* Developed strong communication and conflict resolution skills by addressing concerns with children and parents in the professional manner.

### PROJECTS

**Queen’s University VEXU Robotics Team -** *Mechanical Designer and Driver*  Sept. 2024 - Present

* Designed and optimized multiple mechanical components, including the robot intake mechanism assembly using Onshape CAD design.
* Improved pneumatic systems wiring design to ensure proper pressure regulation and actuator control for the robot shooting mechanism competition readiness.
* Conducted testing and validation of mechanical systems to ensure reliability and durability under competition conditions
* Lead driver contributing to a 4th place World Skills Score and qualified for the Vex World Championship 2025

**Position Tracking Autonomous Robot –** *Design and Programming Lead* Sept. 2022 – June 2024

* Designed and built the drivetrain with visual and inertial (IMU) sensors and implemented position tracking and pure pursuit algorithms, achieved sub-centimeter accuracy and stability.
* Led the team and won the 1st place (World Skills Champions) at the 2024 VEX AI World Championships at Huston, TX.

**Multi-Functional Climbing Robot –** *Team Lead*  June. 2023 – May 2024

* Designed and built robots to score game objects and climb a pole under strict motor/power constraints, iterating designs to improve climbing reliability and height.
* Implemented a PTO (Power Take-Off) mechanism to power a winch with motors from the drivetrain for efficient robot climbing.
* Documented the design process and iterations in a detailed engineering notebook.

### CERTIFICATION & TRAINING

* First Aid & CPR/AED level C | Competitive Men’s Artistic Gymnast | Trained Artistic Gymnastics Coach | VRC Robotics Coach Training Certificate