

Olivia Fan

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EDUCATION

BASc Mechanical Engineering + PEY Co-op, University of Toronto, St. George Campus

2024 - 2029

- Minor in Engineering business
- Sessional GPA: 3.88; Cumulative GPA: 3.73; Dean's List all semesters to date

HIGHLIGHTS OF SKILLS AND ACHIEVEMENTS

- CAD / Design: Solidworks, Altium
- Structural Analysis: Ansys
- Programming: Python, MATLAB, basic C with Arduino
- Experience operating 3D printers
- Fluent in English, French and Mandarin

PROFESSIONAL EXPERIENCES

Research Volunteer at PCIGITI Surgical Robotics Lab

Sept 2025 - Date

SickKids Hospital, Toronto, ON

- Assembled an ORCA open-source robotic hand, including 3-D printing, wiring, and system calibration
- Documented build procedures, design changes, and test results to support future reproducibility and maintainability of the ORCA hand
- Recorded and presented progress, identifying issues and proposing solutions

Project Manager in Engineering Design Team

Jan 2025 - May 2025

Engineering Strategies and Practices II, University of Toronto

- Created and streamlined the project schedule and distributed tasks using Microsoft Project
- Spearheaded a team of six members to design and prototype a fully automated DSC crimper
- Scheduled team meetings, ensuring clear communication and alignment on project goals and deadlines.
- Conducted comprehensive client meetings and site visits to collect vital data, identify potential issues, and produce effective solutions.

Automated Shuttle Feeder

July 2025 - Aug 2025

Personal project

- Designed and fabricated a machine which automatically launches badminton shuttles in collaboration with a partner
- Engineered parts in SolidWorks and operated a 3D printer to produce physical components
- Assembled and programmed an electronic system integrating an Arduino, 775 motors and a stepper motor
- Product successfully launches multiple shuttles automatically, increasing a player's capabilities during solo-training