

SARA FARID

Richmond Hill, ON Canada, L4C 0E1 • (416) 821-2831

sara.farid@ontariotechu.net • [linkedin.com/in/sara-farid-855b0b324](https://www.linkedin.com/in/sara-farid-855b0b324)

OBJECTIVE

To gain mentorship, insight, and networking opportunities through the Tech@RBC Women's Advisory Program to grow as an aspiring Mechatronics engineer and contribute to a more inclusive and innovative tech industry.

HIGHLIGHTED SKILLS AND QUALIFICATIONS

Technical Skills:

- Programming Languages: C++, Java, PLC(Ladder Logic - basic/intermediate), Arduino (C/C++)
- CAD & Design: SolidWorks (introductory), 3D printing, prototyping
- Hardware: Circuit design, soldering, sensors, LCDs, LEDs, microcontrollers, mechanical assembly
- Software Tools: Microsoft Office Suite, Google Workspace
- Languages: Fluent in English, French, Spanish, and Farsi

Leadership and Communication:

- Led robotics teams and group engineering projects with a focus on inclusivity and results.
- Strong teamwork and communication skills developed through co-op, academics, and sports.
- Experience tutoring and adapting instruction to learners' styles in math and French.

EDUCATION

*Bachelor Of Engineering (BEng), Mechatronics Engineer & CO-OP • Ontario Tech University, Oshawa
Graduation Year (2028)*

WORK EXPERIENCE

Cashier/Self Check-out • Food Basic, Richmond Hill (06/2024) - Present

- Operate POS systems and assist customers in self-checkout stations.
- Resolve issues and guide while maintaining a clean checkout area.
- Handle transactions efficiently while ensuring accuracy and security.

Tutor • Tutoring, Richmond Hill (02/2023) - Present

- Provide tutoring in Math and French to elementary and high school students.
- Tailor teaching approaches to individual learning styles.
- Help students improve academic performance and confidence.

Cashier • Dollarama, Richmond Hill (09/2022) - (12/2022)

- Operated cash register and maintained merchandise displays.
- Balanced responsibilities between school and work.
- Developed organizational and time management skills.

PROJECTS EXPERIENCE

VEX Robotics Design & Leadership (STL Robotics Team 82855Z — Team Captain)

- Led the design, construction, and programming of competition robots using C++ as the first female team captain, using exceptional leadership and strategic development.
- Oversaw CAD design and iterative prototyping using 3D printing and mechanical assemblies.

Arduino Pomodoro Smart Clock(Personal Project)

- Designed and built a programmable Pomodoro timer using Arduino Uno R3, LEDs, and an LCD1602 display.
- Implemented timed study/break cycles with visual alerts and stretch reminders
- Integrated user input through buttons and modular hardware design

Rickshaw & Aircraft Landing Gear Mechanical Build (University Project)

Ontario Tech University

- Designed and built scaled mechanical models of a rickshaw and an aircraft landing gear system (Boeing/Airbus inspired) using only components from a Meccano kit.
- Applied mechanical engineering principles such as load distribution, leverage, stability, linkage & Theo-Jansen mechanism, and structural integrity.
- Worked under strict material and component constraints to simulate real-world engineering limitations.
- Learned and demonstrated efficient resource utilization, modular design, and effective problem-solving.

Scissor Lift CAD Prototype (University Project)

Ontario Tech University

- Designed a scissor lift mechanism using CAD and engineering principles.
- Collaborated with peers to present project specs and functionality in a team-based environment.
- Applied real-world constraints to design and analysis.

Hand Drill Analysis (University Project)

- Disassembled and reassembled a hand drill to understand mechanical design.
- Presented statistical analysis on torque, gear ratio, and mechanical advantage.

Computer Build Project (Personal Project)

- Assembled a desktop PC from components after researching compatibility and thermal performance

Confidential Mini Projects (Magna Co-op)

- Assisted engineers with CAD, soldering, prototyping, and testing tasks.
- Gained insight into industrial product development cycles and engineering conflict resolution.

ENGINEERING CO-OP EXPERIENCE

Magna International - High School Co-op Student, Newmarket, ON

October 2022- January 2023

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- Participated in team projects involving electronics, mechanical design, and prototyping.
 - Contributed to the creation of a 3D-printed VEX 65-tooth gear.
 - Gained hands-on experience with circuit boards, wiring, soldering, and contributed to engineering meetings, troubleshooting, and project discussions.

AWARDS

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- 2024-2025 - Ontario Tech President's Honours List.
 - 2020-2024 School Year Honour Roll - St. Theresa of Lisieux.

- 2021 and 2022 French Certificate (St. Theresa of Lisieux).