

# Cole Fuerth

✉ colefuerth@gmail.com | 📱 SquareWheelBike | 🌐 Cole Fuerth | ☎ 519.300.2877

## EXPERIENCE

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### University of Windsor

Jan. 2022 – Present

#### Research Assistant

Windsor, ON

- Assisted in research activities for the Department of Electrical and Computer Engineering at the University of Windsor for Dr. Bala Balasingam.
- Assisted MASc students in developing data collection tools for the study of Battery Management System (BMS) performance.

### Centerline Ltd.

May. 2019 – Sept. 2020

#### Controls Engineering Technician

Windsor, ON

- Set-up and debugged industry-standard production machines.
- Programmed Rockwell PLCs, FANUC robots, and various other misc. industry devices.
- Integrated new industry devices with PLCs, such as date scribes, torque units, and cameras.

### St. Clair College

May 2018 – April 2020

#### Audiovisual/IT Support, Tutor

Windsor, ON

- Debugged classroom projectors and audio systems, repaired and assembled old or new audio devices, and supported any internal or external events.
- Worked in the tutoring department, tutoring programming (**C, C#, Java, Ladder**), Differential/Integral Calculus, Physics, Chemistry, and Electrical Circuit Design.

## PROJECTS

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### Electric Motorcycle

- Programmed and assembled an electric dirt-bike.
- Assembled using an **Arduino Mega** for control with **C++**, a touchscreen display, custom aluminum panels, isolated inputs and outputs, and **all-custom power distribution and analog sensing**, mounted on a stripped frame.
- This project was my capstone for Electronics Engineering Technology.

### Electric Long-boards

- Electronics enclosure designed and 3d printed, with custom wiring.
- Batteries are a **completely custom design**, built with 21700 Lithium cells.
- **Won first place** in the hardware category at WinHacks 2021, by passing telemetry over **UART** from the ESC to a **Raspberry Pi**.

## EDUCATION

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### University of Windsor

Sept. 2020 – Present

#### BASc of Computer Science (Honours)

Windsor, ON

- Coursework: C/C++ Programming, Differential Calculus, Assembly, Python, Java, Data Structures & Algorithms, Systems Programming (Linux with C), Software Engineering, AI Concepts
- **89% Major Average**; received Dean's List for most recent completed class year.

### St. Clair College

Sept. 2017 – May 2020

#### Electronics Engineering Technology, Associate Degree

Windsor, ON

- Coursework: DC and AC circuit analysis, analog signals processing, digital systems, C language and PLC programming, microprocessor, and micro-controller programming
- **3.9 Cumulative GPA**; received the Student Leadership Award for graduating class year