Cole Fuerth

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EXPERIENCE

Centerline Ltd. May. 2019 – Sept. 2020
Controls Engineering Technician Windsor, ON

- Set-up and debugged industry-standard production machines.
- Programming of Rockwell PLCs, FANUC robots, and various other misc. industry devices.
- Integration of 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

- Responsibilities included debugging of classroom projectors and audio systems, repair and assembly of old or new audio devices, and supporting 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

Electric Motorcycle

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

Air Suspension System

- Designed firmware and interface, assisted in choosing hardware and sensors for an Air-Ride suspension system for vintage cars.
- Device has active telemetry, height and PSI modes, and user profiles.
- Firmware done in **C++** on an **Arduino Micro**; User display written in **Python** on a **Raspberry Pi**.

Electric Long-boards

- Built a custom electric long board, now selling pre-built boards from a company, **BoardBoys**.
- Batteries are **completely custom design**, built with 26650 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

St. Clair College Sept. 2017 – May 2020
Electronics Engineering Technology, 3-Year Advanced Diploma Windsor, ON

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

University of Windsor Sept. 2020 – Present
Computer Science (Honours) Windsor, ON

- Coursework: C Programming, Differential Calculus, Assembly, Python, Object Oriented Programming with Java, Data Structures & Algorithms, Systems Programming (Linux with C)
- **95.571 Major Average**; received Dean's List for most recent completed class year.