

# Dwayne Burton

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## Technical Skills

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**Languages (Proficient):** Python, C, C++.

**Languages (Familiar):** HTML, CSS, JavaScript.

**Developer Tools:** Git, VS Code, Jira, STM32, ARM, MS Office.

## Education

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**Bachelor of Applied Science, Honors Electrical Engineering Co-op**

**Expected Graduation: Apr 2027**

University of Waterloo

Waterloo, ON

- **Courses:** Fundamentals of Programming (**C++**), Linear Algebra, Calculus 1, Classical Mechanics.
- **Activities:** Firmware Team Member of Waterloo Formula Electric, Electrical Engineering Ambassador and Member of the Computer Science Club.

## Projects

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**Personal Website [Under Construction]**

Dec 2022 - Present

- Implemented responsive design techniques to ensure the website is mobile-friendly (**HTML, CSS, JavaScript**).
- Utilized JavaScript to add interactive features such as a drop-down menu.
- Applied styling using CSS to enhance the visual appeal of the website.

**LeetCode**

July 2022 – Present

- Solved over 60+ Data Structures and Algorithms questions involving HashMaps, Trees, Stacks, Queues, Arrays, Recursion, Sorting, DFS and BFS (**Python**).

**Eden: Environmental Scanner for Planting Purposes**

Nov 2022

- Developed an STM32 Nucleo Board algorithm to interpret information from a photoresistor and a temperature and humidity sensor (**C, STM32**).
- Designed a dynamic output for an LCD screen that displays variable data, alternating between necessary information.

## Experience

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**Waterloo Formula Electric** - University of Waterloo

Sept 2022 – Dec 2022

Firmware Team Member

Waterloo, ON

- Tested vehicle dynamics algorithms using STM32 Nucleo Boards to increase the vehicle's speed and efficiency while abiding by Formula SAE Electric rulesets (**C, STM32, ARM, Jira**).

**STEM Club** - Ajax High School

Feb 2022 – June 2022

Founder/President

Ajax, ON

- Led weekly meetings of 12 executive members to discuss event ideas incorporating STEM concepts for Grade 9 and 10 Students.
- Designed challenges such as Mathematics Themed Escape Room, Engineering Catapults and Chemistry/Biology Experiments that each attracted over 60+ students.

**STEM Tutor** - Ajax High School

Sept 2021 – June 2022

Volunteer

Ajax, ON

- Enhanced the proficiency of Grade 9 and Grade 10 students in Mathematics and Science by an average of 30% by using real-world examples and explaining complex concepts more thoroughly.

**Board Games Club** - Ajax High School

Jan 2019 – Mar 2020

Founder/President

Ajax, ON

- Established the largest student-run club at Ajax High School by organizing daily games for students.
- Led a team of four executive members while organizing meetings, delegating tasks, and acting upon their feedback.