# Arthigan Jeyamohan

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#### EDUCATION

#### University of Waterloo

Waterloo, ON

BASc, Honours Mechatronics Engineering

Sep. 2024 - Present

• 4.0 GPA

## PROJECTS

#### Path Finder Robot | LEGO EV3

Dec. 2024

- Designed and built a robot that finds the shortest path using Depth-First Search to then autonomously navigate
- Developed the robot's navigation system by integrating sensors (colour, motor encoder) for precise movements
- Attached elevator and claw mechanisms for cargo handling, enabling practical applications in rescue scenarios
- $\bullet$  Optimized path efficiency, reducing travel time by 25% compared to sequential node navigation

## UofT Scarborough EaRTH Switch Hackathon | Onshape

Oct. 2023

- Researched and proposed solutions to address range anxiety in electric vehicles
- Recommended solid-state batteries for their extended battery life and faster charge times
- Developed a mock battery pack enclosure using Onshape, demonstrating practical application of design skills
- Achieved 2nd place in the school's competition, contributing to an overall prize of \$2,500

#### EXPERIENCE

# Computer Repair Technician

July 2022 - Aug. 2022

MTC

Whitby, ON

- Diagnosed and resolved hardware and software issues for over 100 customer laptops
- Performed routine maintenance by internal cleanings and OS installs, to enhance device longevity and functionality
- Managed the disposal of scrap parts and batteries, upholding safety standards to maintain a secure work environment

# Electrical Hardware Engineer | Altium

Sept 2024 – Current

UW Midnight Sun

Waterloo, ON

- Developed and created schematic designs based on functional requirements to meet project objectives
- Designed PCB layouts from schematics provided by team leaders, ensuring accuracy and meeting design standards
- Developed a strong foundation in electrical engineering principles, including circuit design and PCB fabrication

# Durham Youth in Policing Student

July 2023 – Aug. 2023

Durham Regional Police Service

Oshawa, ON

- Helped organize community-focused initiatives aimed at making a positive impact
- Routinely used conflict resolution and problem solving skills in collaborative group settings
- Refined leadership skills managing volunteers and participants in policing conferences and events

# SCHOLARSHIPS

## **UofW President's Scholarship of Distinction**

Mar. 2024

• \$2000 awarded to students who achieved a 95% or higher average at the time of admission

### Technical Skills

Languages: Python, Java, C++, RobotC Skills: Excel, AutoCAD, Solidworks, Altium