Arthigan Jeyamohan

📞 647-988-3912 | a3jeyamo@uwaterloo.ca | 🔗 LinkedIn | 🌐 Portfolio

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
- 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 rtesolution 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, Javasciprt, HTML, CSS
Skills: Excel, AutoCAD, Solidworks, Altium, Arduino, Raspberry Pi