Arushan Arulraj

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SKILLS & INTERESTS

Languages & Tools: Python, C++, HTML, CSS, SQL, Javascript, C, React, TypeScript, Git, Jupyter, LaTeX, Figma, VS Code, GitHub
Technical Skills: Arduino, Excel, AutoCAD, TinkerCAD, STM32, SolidWorks, Power BI, Photoshop, Premiere Pro
Certifications: Responsive Web Design - freeCodeCamp, Data Analytics - Cisco, Product Management Basics - Pendo

EXPERIENCE

Engineering Intern
Jan 2025 – Apr 2025

i2r Packaging Solutions
Brampton, ON

- Conducted **mechanical lubrication and seal testing** on manufactured containers, collecting and analyzing **over 100+ data points** to generate reports and graphs, providing critical insights for product improvements.
- Developed data-driven solutions by analyzing large datasets using **Excel, Power BI, and SQL**, identifying inefficiencies in production workflows, reducing aluminium scrap, and improving process efficiency by **20%**
- Collaborated with **multiple** departments to manage projects effectively, applying **project management skills** to coordinate **5+ cross-functional initiatives**, reducing project delays by **3-5 days**
- Gained proficiency with the **AS400** software to manage and monitor inventory stock levels, and **assisted in the system migration** from **AS400 to SAP** for improved supply chain operational efficiency.

AI Model Developer/Trainer
Dec 2024 – Present

Outlier
Remote

- Debugged and rewrote **Python** code generated by LLMs for **5+ clients**, identifying logical and syntax errors to ensure functionality, efficiency and quality.
- Evaluated **30+ LLM-generated responses** to user questions and image inputs, identifying errors and missing details, and refined prompts to improve AI output accuracy by **75%**.

Computer Technician Intern
Jun 2023 – Dec 2023

Canta Drafting Services
Scarborough, ON

- Streamlined employee onboarding time by **2–5 days** by assisting with the setup and configuration of office **computers and network systems**, resulting in a faster and smoother integration process for new hires.
- Improved system reliability by diagnosing and resolving **hardware failures and software errors**, resulting in a **80%** decrease in recurring error messages
- Expanded technical design contributions by using design software to draft **over 20** custom structural components, including **columns and joists**, resulting in more tailored and accurate construction solutions.
- Improved customer service efficiency by providing **language translation and communication support**, resulting in smoother interactions with **4–6** clients per day and improved customer satisfaction

PROJECTS

MedicMind | *React, Typescript, Python*

- Developed an emergency response app using **React** and **TypeScript**, integrating the **OpenAI API** to generate first aid guidance and the **Web Speech API** for voice-assisted instructions while also including real-time voice-to-text input, and automated emergency report generation.

Arduino Fridge | *C++*

- Engineered a miniature **Arduino-controlled** refrigeration system using **C++**, integrating **5** user-controlled functions, a **servo-actuated door**, temperature-regulated fan, door-triggered **LED** lighting, **rotary switch** for setpoint control, and real-time **LCD** temperature display.

Banking Management System | *Python*

- Developed a **Python-based** banking management system with **text file I/O** for persistent storage, featuring an **ASCII-enhanced UI** and role-based access for customers (transactions: withdraw, deposit, transfer) and bankers (account management and transaction history review).

EDUCATION

University of Waterloo
Waterloo, ON

Candidate for BASc (Computer Engineering) - Honours, Co-operative
Expected Graduation 2029

- **Relevant Coursework:** Fundamentals of Programming, Digital Circuits & Systems, Engineering Economics