

## EDUCATION

**McMaster University**  
*Bachelor of Computer Science | GPA: 4.0*

Sept 2021 — Apr 2026

- Relevant courses on Data Structure and Algorithms, Software Development Principles, Formal logic and Discrete Math
- Provost Honour Roll and Dean's honour roll for achieving a GPA of 4.0

## EXPERIENCE

**Software Engineering / Machine Learning Intern**  
*Bell Canada | Python, VertexAI(GCP), LLM, Next.js, React, FastAPI, Big Query, PostgreSQL, Cloud Run*

May 2023 — Aug 2024  
Toronto, ON

- Led planning and implementation of a fullstack generative AI app, reducing training costs by **65%** through simulating a customer.
- Collaborated with a team of **5** to scale the app for **5,000+** agents, leveraging **Next.js, FastAPI, and PostgreSQL**.
- Improved agent's performance by **30%**, utilizing Gemini's tool calling and dynamic rubrics to provide personalized feedback
- Increased the realism of scenarios through prompt engineering and fine tuning the LLM's weights

**Teaching Assistant**  
*McMaster University | Python, Bash, PostgreSQL, Discord API*

June 2022 — Present  
Hamilton, ON

- Optimized grading process for **1,000+** course materials (labs, assignments, exams) by developing **Python and Bash** scripts
- Taught **Python, C, Bash, and Linux fundamentals** to **100+** students through tutorials and labs

**Technical VP**  
*DeltaHacks | Next.js, TRPC, Prisma, Netlify, Tailwind, NextAuth.js, Typeform, PostgreSQL*

Jul 2022 — Present  
Hamilton, ON

- Managed **7** developers building a stack ranking based judging platform, streamlining **30+** judges' evaluation of **100+** projects
- Integrated **TRPC, Prisma, and Netlify functions** stack which **scaled** the backend to handle **10,000+** requests throughout the year
- Developed a graph-based matchmaking tool that paired over **500** hackers into compatible teams based on interest and skillset

## PROJECTS

**Arian.gg | Personal website**  
*Next.js, React, Tailwind, Python, GPT-4o, LLM, Sanity.io*

- Designed and developed a minimalistic and responsive personal website using **React** to showcase my projects and skills
- Created a blog using **Sanity.io** to share thoughts and technical deep dives
- Integrated a digital persona, leveraging **GPT-4o** to enable unique and innovative viewer interactions

**Grassy | A friendly bracket robot that plays rock paper scissors**  
*Python, Rive, React, OpenCV, websockets, MQTT*

- Created a frontend interface to communicate over mqtt websockets and show robot emotions through **Rive** animations
- Implemented a tracking algorithm using **OpenCV** to find people and prompt them to play rock paper scissors

## HACKATHONS

**Scuba - Declutter your email with ai agents | HackMIT**  
*Python, LlamaIndex, Langchain*

- Developed 5 LLM agents to automate emails using **LlamaIndex** and the **ReAct** reasoning method
- Created a **RAG** model based on past emails to allow extensive personalization and accuracy

**Dash - All in one dashboard for digital life | HacktheNorth**  
*GCP, Next.js, React, Typescript, Tailwind, Prisma ORM, CockroachDB*

- Integrated with Yahoo, GitHub and Google APIs such as **Gmail, Calendar** to provide realtime updates
- Implemented a custom grid component in React to allow maximum user customizability

## SKILLS

Languages	Python, Web Development (JavaScript, Typescript, HTML, CSS), Java, C++, C, Rust, Bash, Haskell
Frameworks	React, Next.js, Tailwind, Django, FastAPI
Tools	Linux, Git, Cloud Services (Google Cloud Platform, AWS), Relational Databases (SQL, PostgreSQL)
Design	Prototype design with Figma, Photoshop