Arya Patel

 aryap.xyz   github.com/Arya-P05   linkedin.com/in/arya-pa   arya.patel2354@gmail.com

EDUCATION

University of Waterloo   Waterloo, ON
Bachelor of Computer Science and Finance   *2023 - 2027*

TECHNICAL SKILLS

Languages: Python, Java, C++, C, SQL, JavaScript, TypeScript, HTML, CSS, Bash
Frameworks: Node.js, Flask, GraphQL, Next.js, React, TensorFlow, PyTorch, .NET Framework, Jest
Tools: MySQL, PostgreSQL, Docker, Kubernetes, AWS (RDS, S3, Lambda, EC2), GCP, SQL Server, GitLab CI/CD

EXPERIENCE

MPAC   May 2024 - Aug. 2024
Software Engineering Intern
- Optimized MPAC's **Java** based Geo-spatial **Convolutional Neural Networks** classification accuracy by **16%**
- Developed **4+** internal **RAG LLM** models, and reduced cloud environment response times by **0.4** seconds
- Built **AWS SQS** queue with **Spring Boot** endpoints, to automate malicious content checks using **Java Streams**

Hack The North   Jan. 2024 - Present
Frontend Software Engineer
- Upgraded sponsorship dashboard to reduce data rendering time by **34%** in HTN's **distributed cloud** setup
- Implemented a **responsive** design on the dashboard table, allowing seamless usability across **10+** device types
- Built an automated reminder system, securing **$500,000+** in sponsorship and reducing manual workload by **20%**

Guardian   Sept. 2023 - Feb. 2024
Software Engineering Intern
- Engineered a **Python backend** health appointment scheduling feature, driving app adoption to **600+ MAUs**
- Optimized scheduling UX with efficient **RESTful API** endpoints and **PostgreSQL** by reducing response times
- Improved app security protocols by automating regular vulnerability assessments using **AES-256 encryption**

PROJECTS

Echo | *Hume AI, React, Node.js, JavaScript, TypeScript*
- Developed a **real-time sentiment analysis** application for **reminiscence therapy** within dementia patients
- Outperformed industry benchmarks with a **25%** improvement in mood prediction accuracy within patient trials
- Implemented the **Hume AI API** to determine voice intonation and movement, for nuanced emotional analysis

Robo-Advisor | *Python, Pandas, NumPy, Matplotlib, Git*
- A **quantitative analysis script** predicting the least volatile portfolio from a set of arbitrary user-provided stocks
- Implemented **multi-threading**, queues and recursion to reduce request runtime from **RESTful APIs** by **53%**
- Consistently generated portfolios with **over 40% less volatility** when compared to the S&P500 and NASDAQ

Promptopia | *JavaScript, TypeScript, Next.js, HTML/CSS, Git*
- Developed a full-stack **CRUD** application using Next.js, utlizing **React Hooks** and **GraphQL** to streamline UX
- Achieved a **20%** reduction in page load times through **code refactoring**, allowing for exceptional app scalability
- Integrated an **OOP**-based framework utilizing **Java** and **SQL** for secure user data storage and retrieval processes

Movieland | *JavaScript, React, OMDB API, HTML/CSS*
- **Reverse-engineered** the Netflix homepage to create a **React**-based clone with searchable movies and TV shows
- Featured **IMDb ratings**, enabling users to see public ratings for enhanced decision-making and user engagement