

Aaryan Patel

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EDUCATION

University of Waterloo

Bachelor of Computer Science, Minor in Economics

- Artificial Intelligence Specialization

Waterloo, ON

June 2027

EXPERIENCE

Software Developer Intern

Sep. 2024 – Dec. 2024

RBC Capital Markets

Toronto, ON

- Developed full-stack trading analytics platform using **React**, **Next.js**, **Kubernetes**, and **MongoDB**, leveraging **AI-driven trade reports** enhance market predictions and decision-making for traders
- Utilized **Redux** for state management and **React Query** for API integration and caching, reducing API call latency by **40%** and ensuring real-time updates for **datasets exceeding 20K rows**.
- Introduced interactive **Liquidity Matrix** feature to analyze & visualize FX market liquidity across **24 trading hours**, providing actionable insights with an **interactive and concise interface** to improve trading decisions
- Leveraged **Highcharts**, **AG Grid**, and **React Virtualized** to improve index analytics performance by **35%** with dynamic visualizations & auto-complete filtering, delivering a seamless user experience

Application Developer

Jan. 2024 – May 2024

CGI Inc.

Toronto, ON

- Specialized in building and managing **cloud-based API ecosystems** using **Google Cloud Platform** as well as deploying, monitoring, and managing enterprise solutions on the cloud
- Designed and deployed a **PostgreSQL** database integrated with Keycloak, streamlining authentication process
- Leveraged **Terraform** to automate infrastructure provisioning, which optimized deployment time by up to **70%**, significantly enhancing operational efficiency

Junior Software Developer

May 2023 – Aug. 2023

JANA Corporation

Aurora, ON

- Developed backend solutions using **C#**, **ASP.NET**, and **SQL Server**, contributing to the architecture, implementation, and maintenance of pipeline integrity management application
- Led the optimization of SQL queries, significantly enhancing the performance of the data management **REST API**, which improved **dynamic data retrieval** and display
- Introduced new visualization feature that displayed risk level results for **predictive risk analysis**, aiding in better decision-making for pipeline integrity management
- Lead migration of APIs to a **high-performance serialization library**, boosting API performance by up to **50%**

PROJECTS

G.R.A.C.E. | *FastAPI, Next.js, PostgreSQL, Deepgram, OpenAI, Cartesia, Docker*

June. 2025

- **AI-powered social companion** that engages with isolated users in lifelike **face-to-face conversations**
- **Built** real-time voice-to-avatar pipeline using **Pipecat** to deliver lip-synced 3D avatar in **< 1s latency**
- **Designing** accessible & responsive UI with **Next.js + Shadcn** and ensure smooth lip sync using **Cartesia**
- **Creating** WebSocket server with **Postgres** chat history for caregiver dashboard with **conversation analytics**

STYLit | *Next.js, Express.js, MongoDB, MediaPipe*

Jan. 2025

- AI-powered virtual dressing room using **image segmentation** and **pose estimation** to enhance online shopping
- Integrated real-time **body pose detection** models to ensure accurate clothing placement and user satisfaction
- Created an intuitive, interactive experience for virtual try-ons, offering a **seamless user experience**

CERTIFICATIONS

AWS Certified Cloud Practitioner

May 2024 – May 2027

Google Cloud Certified Associate Cloud Engineer

Mar. 2024 – Mar. 2027

TECHNICAL SKILLS

Frontend: TypeScript, Next.js, React, Angular, Node.js, React Query, Redux

Backend: C# (.NET), Go (Gin), Python (FastAPI, Django), JS (Fastify, Express), SQL (Postgres), MongoDB, Redis

DevOps: Git, Docker, Google Cloud, AWS, Kubernetes, CircleCI, Terraform, Jenkins

Misc: C/C++, Java, Supabase, Stripe, Cloudflare Workers, Pandas