Aditya Patel

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Skills

Programming Languages: Python, C++, C, Go, C#, TypeScript, JavaScript, HTML, CSS, SQL

Technologies: React, Node.js, Django, Flask, AWS, Kubernetes, Docker, Terraform, Git, Kafka, Spark, Tensorflow, Pytorch

Experience_

Wealthsimple May 2025 - August 2025

Software Engineering Intern

Toronto, ON, Canada

• Building scalable backend systems and data infrastructure for applied algorithmic investing under the Order Generation Team

Wealthsimple May 2024 - August 2024

Software Engineering Intern

Toronto, ON, Canada

- Engineered trading algorithm optimization by developing new distributed data infrastructure with AWS Redshift & S3; Built ETL pipelines & auto-spawning 500+ containers on EKS Kubernetes to parallelize batch multiprocessing, cutting execution runtime by 80%
- Served as **technical owner (DRI)** for a **full-stack trading simulation platform** using Ruby on Rails, React & **Python GraphQL**, enabling **14-minute** experimental trading runs that manage **\$12+ billion** & comparing orders generated by algorithm with production runs

Royal Bank of Canada May 2023 - April 2024

Software Engineer Intern (12 months Co-op)

Toronto, ON, Canada

- Architected **distributed log parsing infrastructure** for enterprise **CI/CD pipeline** using Python, **Kafka** middleware, Spark, AWS, PostgreSQL and Elasticsearch, reducing multi-region deployment time by 45% and streaming real-time application deployment data
- Developed Helios **AI tool** for deployment data insights by designing **RAG system** with LangChain agents, **fine-tuned LLMs** (Mistral-40B, Llama 2) on private AWS along with embeddings vector database, improving deployment error resolution time by 60%
- Built & deployed 10+ ETL pipelines using Airflow DAGs to scale ML training platform by streamlining DevOps data ingestion

Scotiabank Capital Markets

May 2022 - August 2022

Trading Floor Software Developer Intern

Toronto, ON, Canada

- Built & delivered **4 full-stack web tools** for end-to-end trading operations (email, platform, options data validation, JSON-To-Excel, SSH data transfer) using ASP.NET, React & SQL, handling **50K+ monthly user traffic** & boosting trading floor operational efficiency
- Designed high-performance **C# API Server** using asynchronous low-latency programming for automating post-trade logging with JSON-to-Excel conversion, **boosting reliability by 40%** using optimized AWS ALB load balancing, plus configurable depth parsing

Stealth Startup

October 2021 - February 2022

Lead Full-Stack Developer

Toronto, ON, Canada

- Developed e-commerce platform frontend for Enactus TMU-incubated startup, leveraging Spring Boot, React and MongoDB
- Achieved \$650/month reduction in AWS costs by implementing Terraform & AWS Auto Scaling for optimized EC2 compute usage

Projects_

Deskgenius | Website - Frontend 3D rendering engine using React & Three.js for visualizing your desktop setups in a virtual space.

BudgetChat | GitHub - Low-level Go network server (TCP|UDP network protocol) for chatting, Terraform orchestrated on AWS EC2.

Continuesage | GitHub - Backend LangChain Al server for Continue.dev, serving inference on LLMs hosted via AWS SageMaker.

Education ____

Toronto Metropolitan University

September 2021 - April 2026

Bachelor of Science (Honours), Computer Science (Co-op)

Toronto, ON, Canada

- Coursework: Machine Learning, Computer Security, Database Systems, Networks, Operating Systems, Data Structures & Algorithms
- Certifications: Advanced Learning Algorithms Stanford University (Certificate)