

PROFILE

Full-stack and AI/ML software engineer with **3+ years building web applications, backend services, trading systems, and ML pipelines** using **Python, TypeScript, React, FastAPI, SQL, PyTorch, TensorFlow, Docker, and cloud tools**. Focused on **product ownership, scalable APIs, data workflows, LLM/RAG systems**.

EXPERIENCE

SOFTWARE DEVELOPER, FULL-STACK | Lexington Innovations Feb 2025 - Present
Java • Spring Boot • Kafka • Angular • MySQL • TypeScript • JavaScript • Docker • Kubernetes • AWS EC2 • GitHub Actions

- Led development of a trading platform, supporting **100+ users** and **12k+ trades** with real-time trade flows.
- Built **backend services and user-facing features**, handling APIs, data models, event-driven updates, and reporting.
- Improved **performance and reliability**, reducing latency risk in business-critical production systems.
- Partnered with stakeholders, translating evolving requirements into **scalable, maintainable technical solutions**.

MACHINE LEARNING ENGINEER | Adaptive Finance Technologies Feb 2024 - Feb 2025
Python • PyTorch • TensorFlow • Scikit-Learn • NumPy • SciPy • Matplotlib • Seaborn

- Developed **ML models for HFT** over **500,000+ data points**, building scalable financial data pipelines.
- Built **training, validation, and evaluation workflows**, improving robustness via backtesting and statistical analysis.
- Optimized **large-scale calculations and data workflows**, supporting performance-critical model experimentation.

SOFTWARE DEVELOPER, FULL-STACK | Freelance, Part-Time Sep 2022 - Dec 2025
React • Vite • Next.js • TypeScript • JavaScript • Node.js • Python • FastAPI • PostgreSQL • Supabase • GitHub • Vercel

- Delivered **SaaS platforms and APIs for 10+ clients**, owning architecture from idea to production.
- Built **React/Next.js interfaces and Python/FastAPI services**, integrating workflows, databases, and reusable components.
- Improved **development and deployment workflows**, using GitHub and Vercel for reliable production releases.

SOFTWARE DEVELOPER | York University Apr 2024 - Aug 2024
React • TypeScript • Node.js • Express • MongoDB • AWS • CI/CD • HTML • Tailwind • CSS

- Built a **full-stack web application**, developing REST APIs, dynamic UI components, and backend integrations.

BACKEND DEVELOPER (PEY CO-OP, INTERNSHIP) | Ceridian HCM, Inc. Sep 2020 - Aug 2021
C# • .NET • Azure • SQL Server • Azure DevOps • Entity Framework • Git

- Developed **backend services**, optimizing SQL queries and API endpoints in scalable cloud systems.

PROJECTS

ARCHIPELAGO - SEMANTIC MEMORY SYSTEM [↗](#) Apr 2026 - Present
Python • FastAPI • PostgreSQL • pgvector • Embeddings • LLMs • TypeScript • Next.js • React • Tailwind CSS

- Building **RAG-powered retrieval system** for cross-document search, knowledge organization, and structured workflows.
- Developed **typed FastAPI services and PostgreSQL-backed pipelines** for indexing, metadata extraction, and retrieval.
- Designed **query understanding layer** for intent classification, ambiguity detection, and structured API responses.

SLOTERA - RESERVATION & SESSION MANAGEMENT SYSTEM [↗](#) Dec 2025 - Present
TypeScript • Next.js • React • Python • FastAPI • PostgreSQL • Redis • WebSockets • Docker

- Built **multi-tenant SaaS platform**, implementing modular backend services and tenant-isolated architecture.
- Developed **real-time product workflows**, using Redis streams, WebSockets, and async event-driven logic.
- Designed **scalable APIs and responsive interfaces**, supporting reservations, ordering, and analytics modules.

EDUCATION

UNIVERSITY OF TORONTO | Honours Bachelor of Science

- **Computer Science Specialist**, Focus in Artificial Intelligence • **Dean's List** • **University of Toronto Scholar Award**

SKILLS

Full-Stack Engineering | React • TypeScript • JavaScript • Vite • Next.js • Angular • Node.js • HTML • CSS

Backend & APIs | Python • FastAPI • Java • Spring Boot • C# • .NET • REST APIs • API Design • Microservices

AI, ML & Retrieval | PyTorch • TensorFlow • Scikit-Learn • LLM APIs • RAG • Embeddings • pgvector • Hybrid Retrieval

Data & Systems | SQL • PostgreSQL • MySQL • SQL Server • Redis • Kafka • Data Modelling • Data Workflows

Cloud & Delivery | Docker • Kubernetes • AWS • EC2 • Azure • GitHub Actions • CI/CD • Git • Vercel

Engineering Practices | Testing • Code Reviews • Debugging • Documentation • Product Ownership • Reliability • Fast Learning