Chris Lawrence

Software Developer

c.lawrence908@gmail.com
ChrisLawrence.ca - LinkedIn - GitHub
780-937-6367

Software Developer and Data Science student with experienced in **full-stack development**, **machine learning**, and **cloud infrastructure**. Skilled in building scalable systems using **FastAPI**, **Django**, and **Docker**, with production deployments on **Azure** and **GCP**. Demonstrated success integrating **AI models**, designing secure APIs, and leading cross-functional projects. Backed by 10+ years of leadership in the Canadian Armed Forces, bringing discipline, clarity, and a collaborative mindset to technical problem solving.

HIGHLIGHTS OF QUALIFICATIONS

- Proficient in modern web frameworks and API development using **FastAPI** and **Django**, with experience designing scalable microservices and RESTful systems.
- Understanding of **cloud architecture and deployment**, including **Dockerized services**, **reverse proxies (Nginx)**, **SSL/TLS configuration**, and **CI/CD pipelines** on **Azure** and **Google Cloud Platform (GCP)**.
- Skilled in **API authentication mechanisms**, including **API Key**, **JWT**, and **OAuth2**, with secure session handling and rate limiting strategies.
- Applied **machine learning and AI models** in production using **TensorFlow/Keras** and **OpenAI GPT-4**, integrating image recognition and generative language models for real-world applications.
- Experience with **database design and optimization**, using **PostgreSQL**, **SQLite**, and ORMs like **SQLAlchemy** with migration tools (Alembic) for complex relational systems.
- Demonstrated ability to manage full project lifecycles, from system architecture and data pipelines to frontend integration and deployment, with a strong emphasis on maintainability and performance.
- Proven leadership and team coordination from 10+ years in the Canadian Armed Forces, applied to technical project management and collaborative software development environments.

TECHNICAL SNAPSHOT

Languages:	Python, JavaScript (ES6+), TypeScript, SQL, Bash
Frameworks/Libraries:	FastAPI, Django, TensorFlow/Keras, React, SQLAlchemy, Tailwind CSS
Platforms/Tools:	Docker, Nginx, GCP, Azure, Redis, Jupyter
Databases:	PostgreSQL, SQLite, Supabase
APIs & Integrations:	OpenAI GPT-4, Stripe, SendGrid, Lulu, OAuth2, JWT, Google Calendar API

EDUCATION

- **Bachelor of Science in Computer Science,** Vancouver Island University   **Expected 2026**
- **Computer Science Diploma,** Vancouver Island University   **2024**

WORK EXPERIENCE

Freelance Software Developer | Remote · Contract   **June 2025 – Present**

- Developed a full-stack prediction platform using **FastAPI**, **TypeScript**, **Solidity**, and real-world financial/NFT data.
- Built microservices with **DockerCompose**, **PostgreSQL**, **Redis**, and **Supabase** for auth and real-time features.
- Engineered secure **JWT** and **OAuth2**-based identity systems with role-based access and rate limiting.
- Deployed multi-service backend for NFT minting, EVM blockchain interaction, and performance-based betting.
- Implemented **CI/CD** with **GitHub Actions**, monitored via **Prometheus**/**Sentry**, and enforced container security best practices.

Training and Operations Team Leader | Denwood, AB   **2020 – 2022**
Canadian Forces Base Wainwright

- Managed a central database for tracking training resources, utilizing tools like Excel and military-specific systems.
- Prepared and delivered training status reports to upper management on staffing and equipment deficiencies.
- Directed a team of two in delivering operational reports that enhanced readiness for high-priority training events.
- Coordinated with regional and national stakeholders to secure critical resources, ensuring mission success.

Instructor | Denwood, AB   **2019 – 2020**
Canadian Forces Base Wainwright

- Delivered classroom and field training for 30–40 personnel, emphasizing teamwork and operational readiness.
- Designed and implemented contingency plans to adapt training schedules to changing circumstances.
- Mentored junior instructors, ensuring consistency in curriculum delivery and adherence to standards.

CORE PROJECTS

CapitolScope – Congressional Trading Tracker
Built a full-stack platform to track and analyze congressional stock trades, using **FastAPI**, **PostgreSQL**, and **React**. Engineered multi-source financial data ingestion, async APIs, real-time dashboards, and tiered user access with **JWT**, **Stripe**, and **Supabase**. Provides financial transparency by analyzing congressional trading patterns.

Magic Pages – Personalized Storybook Generator
Co-founded a personalized storybook generator powered by **OpenAI** and deployed on **Azure**. Built a secure **Django REST API** pipeline for AI-generated content, PDF processing, and **print-on-demand**. Integrated WordPress frontend, **Azure Key Vault**. Pre-revenue e-commerce company with a scalable sales platform.

AstrID – Astronomical Identification
Built an ML pipeline using Python and TensorFlow to detect and classify stars in telescope images with >95% accuracy. Designed a U-Net segmentation model, automated dataset generation via SkyView/Vizier APIs, and integrated FITS/WCS preprocessing. Leveraged GPU training, star predictions by magnitude.

PROFESSIONAL DEVELOPMENT

Harassment and Violence Prevention for Managers, Canadian Armed Forces
Primary Leadership Qualification, Canadian Armed Forces
Security Awareness, Canadian Armed Forces