STEVE CHEN

Software Engineering (AI Minor) — Class of 2026 — Montreal, Canada

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EDUCATION

McGill University, Montreal, Canada   2022 – 2026 (Expected)
Bachelor of Engineering – Software Engineering (AI Minor), **GPA: 3.73/4.0**

SKILLS

DevOps & Cloud: Terraform (IaC), Jenkins (CI/CD), Docker, Kubernetes, AWS (EC2, IAM, S3), Proxmox
Languages: Go, Python, Bash, Java, C++, SQL
Data & Systems: Apache Kafka, Spark, MySQL, PostgreSQL, Redis, Linux (Ubuntu/Alpine), Wireshark
Tools: Git, GitActions, Minikube, Helm, Grafana

PROJECTS

Private Cloud Infrastructure & DevSecOps Lab — Self-Hosted   May 2025 – Present

– **Architected** a high-availability virtualization cluster using **Proxmox VE**, hosting critical services including a personal NAS and AI inference servers.

– **Automated** cloud infrastructure provisioning using **Terraform (IaC)** to deploy **AWS EC2** instances with managed Security Groups and SSH key pairs.

– **Engineered** a **Jenkins Declarative Pipeline** featuring **parallel execution** for Spring Boot and React builds, utilizing **Docker-in-Docker** agents to package optimized production images (Nginx/Java 21 JRE).

– **Secured** remote access via a self-hosted **WireGuard VPN**, enabling encrypted tunneling to internal services without exposing ports to the public internet.

Financial Analysis Engine (PySpark + Kafka Streaming) — GitHub   Nov 2025 – Present

– **Built** a real-time financial data pipeline using **PySpark Structured Streaming** and **Apache Kafka** to process live stock tick data.

– **Implemented** a **Medallion Architecture (Bronze/Silver/Gold)** with **Parquet-backed data lakes** for scalable ingestion.

– **Deployed** and validated end-to-end streaming infrastructure locally using **Docker Compose**, ensuring reproducible development environments.

EXPERIENCE

Software Developer Intern – StreamWise   Sep 2025 – Dec 2025

– **Architected** a **Go-based YouTube livestream ingest** service supporting multi-stream monitoring and lifecycle control.

– **Evaluated** microservice performance using **Kubernetes** clusters with **Minikube**, identifying and resolving bottlenecks under concurrent workloads.

– **Designed** a secure **OAuth 2.0 authentication flow**, ensuring secure service-to-service communication.

Software Developer Intern – Ericsson   Jan 2025 – Aug 2025

– **Streamlined** deployment and testing workflows by building internal tooling with **Bash and Docker**, reducing local environment setup time by **50 minutes** per developer.

– **Developed 3 production-grade proof-of-concept applications** to demonstrate 5G network capabilities.

– **Reduced** backend traffic by **83%** through **Redis caching** implementation.

– **Collaborated** on **distributed systems design** and infrastructure trade-off analysis with senior engineers.

IT Support Analyst – IRB   May 2024 – Aug 2024

– **Managed** user access controls and permissions using **Active Directory**.

– **Performed** network security analysis and server maintenance with **Wireshark**, **PowerShell**, and **Ubuntu Server**.

Full-Stack Developer Intern – Payfacto   May 2023 – Aug 2023

– **Engineered** a backend **data-processing pipeline** for an internal news system using **Go and MySQL**.

– **Achieved 92% test coverage** through rigorous unit testing and mock-based simulations.