Omar Moursy, P.Eng

604-363-4981 | omarhmoursy@gmail.com | linkedin.com/in/omarhmoursy | github.com/omarhmoursy

Software Engineer with experience in DevOps, Full-stack Development, and Data Engineering

EDUCATION

Georgia Institute of Technology — Remote
Master of Science in Computer Science (GPA: 4.0/4.0) — *August 2024 – May 2026*

University of British Columbia — Vancouver, BC
Bachelor of Applied Science in Electrical Engineering (GPA: 3.8/4.0) — *September 2016 – May 2020*

TECHNICAL SKILLS

Languages: Python, Java, Kotlin, C/C++, C#, SQL, PySpark, PowerShell, JavaScript, TypeScript
DevOps & Cloud: Git, Gerrit, Jenkins, GitHub Actions, CI/CD, Docker, Azure, AWS, Linux/Unix
Frameworks & Data: Node.js, React, LLMs (Hugging Face), Pandas, Grafana, PowerBI, Postgres, Redis

EXPERIENCE

Software Development Engineer Intern — January 2026 – Present
SAP — *Vancouver, BC*

- Owned enterprise **CI/CD pipeline** optimization; analyzed **Jenkins/Gerrit** bottlenecks and implemented automated testing protocols, reducing deployment failures by 40% and improving release velocity by 30%.
- Proactively identified 15+ critical **security vulnerabilities** through systematic code reviews; implemented automated security scanning, eliminating 100% of vulnerabilities for 50,000+ enterprise users.

Systems & DevOps Intern — September 2025 – December 2025
Teck Resources — *Vancouver, BC*

- Owned design and implementation of **Machine Learning** matching pipeline using **Python and Qwen LLM** to standardize 10,000+ telemetry tags, accelerating vendor migration by 6 weeks.
- Led comprehensive software license audit across **Rockwell/Honeywell** systems; identified unused perpetual licenses and optimized allocation, recovering **$180,000+** in operational costs.
- Engineered real-time **Grafana** dashboards for mining haul cycles by reverse-engineering legacy **SQL** databases; reduced failure resolution from 4 hours to 15 minutes, improving efficiency by 25%.
- Scripted multi-domain **Active Directory** queries with **PowerShell** and visualized hierarchies in **PowerBI** to resolve membership redundancies and enhance operational security.

Software Engineering Intern — May 2024 – August 2024
Daweeny — *Vancouver, BC*

- Integrated Zoom's API using **TypeScript and Node.js**, automating consultations for 50+ weekly telehealth sessions.
- Implemented secure **OAuth 2.0** authentication with **Redis** token caching, improving system efficiency by 35%.
- Built **Express/Postgres** backend integration with **Prisma ORM**, reducing scheduling errors by 40% via automated validation.

RF Systems and Automation Designer — July 2020 – April 2024
Rogers Communications — *Vancouver, BC*

- Designed automation tools using **Python, Pandas and Selenium** to scrape network KPIs and process data, reducing integration errors by 40%.
- Led network expansion project reaching 1.5M new users, collaborating with cross-functional teams to ensure infrastructure readiness.
- Created **Python** scripts to automate documentation generation for engineering reports, reducing manual effort by 60%.

PROJECTS

Multithreaded RPC System | *C, Sockets, RPC, Multithreading* — August 2024
- Created concurrent file transfer server with **sockets** and **Sun RPC**, improving throughput by 30%.
- Developed proxy server with shared memory **IPC** and thread synchronization using **mutexes**.

AI Trading System | *Python, ML, NumPy, SciPy, pandas* — August 2024
- Developed Q-Learning model and portfolio optimizer maximizing Sharpe ratio, outperforming benchmarks.
- Built market simulator with technical indicators (Bollinger Bands, RSI, MACD) for algorithmic trading.