

Elio Di Nino

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Vancouver, BC
contact@eliodinino.com

Computer engineering student with multiple years of experience in both hardware and software. Passionate about solving meaningful problems efficiently and effectively. Excel at low and high-level design, systems integration, and testing. Seeking a 4, 8, or 12 month co-op position beginning January 2024.

Skills

- **Languages:** Java, Python, C/C++, SQL, JavaScript, TypeScript, Terraform, System Verilog, ARM64 Assembly
- **Libraries & Frameworks:** Gradle, JUnit, Pytest, Selenium WebDriver, Flask, Django, OpenTelemetry, REST APIs
- **Tools:** Git, SSH, Linux, Docker, Kubernetes, Jenkins, GitHub Actions, Atlassian Suite, Prometheus, Grafana, Quartus

Education

University of British Columbia

Bachelor of Applied Science - Computer Engineering

Expected May 2026

Dean's Honour List - CGPA: 87.1% | 3.8 / 4.0

Presidential Scholars Award – UBC (2021, Recurring)

- Received the BMO Financial Group National Scholarship, a 4-year renewable award at \$10,000

Technical Experience

D-Wave Quantum

May 2023 – Present

DevOps Co-op

Burnaby, BC

- Implemented a new Kubernetes-based development platform utilizing Terraform to automate setup and define infrastructure as code, simplifying programming environments for over 80 individuals and boosting efficiency by 20%
- Overhauled the build and publication process of company Docker images by creating a Jenkins function that runs builds in the on-premises Kubernetes cluster, reducing work required by 95% and eliminating previous cloud costs
- Centralized company Docker images in a single repository that automated all build, testing, and publishing steps with only 6 lines of configuration per image, eliminating redundant Jenkins pipelines and improving overall organization
- Developed Grafana dashboards integrated with Prometheus metrics, enabling real-time monitoring of service health and key statistics, resulting in improved visibility and informed decision-making

UBC Uncrewed Aircraft Systems, Student Design Team

Sep 2021 – Present

Captain

Vancouver, BC

- Lead a team of 70+ cross-discipline students and manage a budget of \$30,000 to compete in 2 competitions annually

Software Co-Lead

- Acquired a Canadian Advanced RPAS License after 2 months of studying to fly team drones at competitions
- Improved cross-platform compatibility with Docker containers and made 5 [related CI/CD pipelines](#) with GitHub Actions

Software Developer

- Implemented a winch command relay that sent serial signals to an Arduino and received controls wirelessly ([ACOM](#))

Projects

3FA – Multi-Factor Authentication System ([GitHub](#), [Demo Video](#))

- Created a backend API in Python using Flask and SQLite with over 20 endpoints
- Designed and implemented the authentication flow which included session and authentication tokens, encrypted communications, hashed passwords, and automatic timeouts to meet OWASP security standards
- Created GitHub workflows to automate testing for all parts of the system, created app releases and executables, packaged the backend as a Docker image, and automated dependency updates to reduce manual work by 500%
- Used Pytest to achieve 98% line and branch coverage as well as set up Postman to improve manual testing

Multi-Client Server ([Description](#)), CPEN 221

- Constructed a Java server supporting multiple simultaneous clients capable of interacting and fetching Twitter data
- Enabled dual-server routing so that either server can be connected to, and no interruptions occur if one goes offline
- Followed security protocols by hashing and salting all passwords and encrypting incoming and outgoing data via AES

Simple RISC Machine, CPEN 211

- Implemented a Turing Complete 16-bit RISC machine using System Verilog on an FPGA board in 3 weeks
- Subdivided the machine into smaller modules to be designed, tested, and debugged more easily
- Utilized pipelining to increase operations per cycle by 300% and go beyond course expectations