Elio Di Nino

eliodinino ElioDiNino links.eliodinino.com

Markham, ON
contact@eliodinino.com

Skills & Interests

- **Languages:** Java, Python, Golang, JavaScript, TypeScript, C, C++, Bash, HTML & CSS, SQL, Terraform/OpenTofu
- **Libraries & Frameworks:** REST APIs, Agile, Gradle, JUnit, Pytest, Flask, Django, Node.js, NestJS, React, Cypress
- **Tools:** Git, SSH, Linux, Docker, Kubernetes, Helm, Jenkins, GitHub Actions, Confluence, Jira, Grafana, GCP, AWS
- **Interests:** Landscape Photography (6 yrs), Drones (Advanced License), Cycling (2700 km/yr), Travelling (9 countries)

Education

University of British Columbia Expected May 2026

Bachelor of Applied Science - Computer Engineering Dean's Honour List - CGPA: 87.7% | 3.8 / 4.0

Awards: UBC Presidential Scholars Award ($40,000), ECE Undergraduate Scholarship ($2,500)

Experience

IBM Jan 2024 – Present

Software Developer Intern *Markham, ON*

- Developed a custom JupyterLab **Docker** image and **TypeScript** API proxy service to allow 7 million users free access to the OpenAI and watsonx.ai APIs with a daily quota
- Consolidated **TypeScript** Jupyter extensions to eliminate 500 duplicated lines of code and increase reliability by 5x
- Lead the planning and execution of the effort to break up an outdated monolithic service into multiple components using **React**, **NestJS**, and **TypeScript** to improve reliability and developer velocity
- Deployed **GitHub**'s Safe-Settings application on **Kubernetes** to enforce best practices across 200 team repositories

D-Wave Quantum May 2023 – Sep 2023

DevOps Co-op *Burnaby, BC*

- Implemented a new **Kubernetes**-based development platform utilizing **Terraform** to automate the setup and define infrastructure as code, simplifying programming environments for over 80 individuals and boosting efficiency by 20%
- 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
- Pioneered a **Terraform** provider template in **Golang** which allowed multiple internal providers to be created and automatically deployed to Artifactory for general use

UBC Uncrewed Aircraft Systems, Student Design Team Sep 2021 – Present

Captain // Software Lead // Software Developer *Vancouver, BC*

- Led a team of 70+ cross-discipline students and managed a budget of $50,000 to compete in 2 competitions annually
- Improved the cross-platform compatibility of our simulation software with **Docker** containers and made multiple **GitHub Actions** workflows to eliminate manual builds and deployments (UASITL)
- Reduced image streaming latency from 12s to 1s with a **Bash** script running on an onboard **Linux** microcomputer

Projects

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

- Created a backend API in **Python** using **Flask** and **SQLite** to authenticate simultaneous users and serve files
- Designed and implemented the authentication flow which included session and authentication tokens, encrypted communications, hashed passwords, and automatic timeouts to meet OWASP security standards
- Reduced manual work by 7x with **GitHub Actions** workflows to automate testing for all parts of the system, create app releases and executables, package the backend as a **Docker** image, and automate dependency updates
- 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