

# Andre Arcaina

Software Engineer | Full Stack Developer

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## EXPERIENCE

### ENVIRONMENT AND CLIMATE CHANGE CANADA | SOFTWARE ENGINEER INTERN

June 2025 - Present | North York, ON

- Migrated **5,000+ lines** across **5+ legacy Java modules** from **javax.\*** to **Jakarta EE 10**, refactoring deprecated APIs and resolving **300+ compiler warnings**.
- Modernized legacy web apps from **JSF 2.2** to **Jakarta Faces 4.0** and **PrimeFaces**.
- Reduced **Apache Tomcat build time by 33%** by migrating from **Ivy** to **Maven**.

### UNDERGRADUATE SCIENCE SOCIETY OF TMU | BACKEND ENGINEER

January 2025 - Present | Toronto, ON

- Designed and implemented **8+ RESTful CRUD API endpoints** for **users** and **items** databases, adhering to **CLEAN architecture** for maintainable, modular code.
- Developed and executed **20+ unit and integration tests**, increasing project test coverage by **75%**, and ensuring high reliability for core business logic.

### DATAKINETICS | SOFTWARE ENGINEER INTERN

May 2024 - Aug 2024 | Ottawa, ON

- Built an MVP using **Java** and **Spring Boot** to convert **COBOL copybooks** to **JSON**.
- Enabled users to upload copybooks and visualize with **DataTables** and **jQuery**.
- Developed and documented a **Postman test suite** of company APIs.

## PROJECTS

### WHISP | GO, TEMPL, ALPINE.JS, TAILWINDCSS, NEONDB, GCP (CLOUD RUN), DOCKER, MAKEFILE

GitHub | Website

- Developed an **anonymous real-time chat platform** with **Go**, **Templ**, **Alpine.js**, and **TailwindCSS**, providing a seamless and responsive user experience.
- Streamlined deployment using **Docker** on **GCP Cloud Run** and automated build pipelines with **GitHub Actions** for efficient CI/CD.
- Enabled reliable, cloud-native data storage and instant messaging via **NeonDB**.

### FAFNIR | GO, NEXT.JS, POSTGRESQL, GCP, DOCKER, KUBERNETES, PROMETHEUS/GRAFANA

GitHub

- Architected a **scalable** and **modular microservice backend** with an **interactive web user interface** for a trading platform application.
- Developed a custom security service behind a **GraphQL API Gateway** for role-based authorization, and an auth service issuing **JWT** and **CSRF tokens** via **HttpOnly cookies** for frontend authentication.
- Used **gRPC** and **protocol buffers** for efficient, type-safe interservice communication, enabling scalable and performant microservice interactions.

### PATHFINDER | GO, GOROUTINES, CONCURRENCY, FILE TREE TRAVERSAL

GitHub

- Developed a **high performant CLI** in Go for instant codebase mapping and tracking, reporting metrics such as code, comments, and line counts.
- Optimized file traversal and concurrency to deliver **sub 5 second execution** for codebase analysis in projects with **70,000+** files.

## SKILLS

### LANGUAGES

Go • Java • Python •  
JavaScript/TypeScript • SQL  
• GraphQL

### FRAMEWORKS

Spring Boot • Flask • FastAPI •  
Django • React/Next.js

### LIBRARIES

JPA • Hibernate • JDBC •  
SQLAlchemy • OpenCV

### TOOLS

Docker • Kubernetes • GCP •  
Vercel • PostgreSQL • MySQL  
• NeonDB • MongoDB •  
UNIX/Linux • JetBrains

### CONCEPTS

Microservices • REST/gRPC  
APIs • CI/CD • Agile/Scrum •  
System Design • Object  
Oriented Programming

## EDUCATION

### TORONTO METROPOLITAN UNIVERSITY (FORMERLY RYERSON UNIVERSITY)

COMPUTER SCIENCE CO-OP - BSC  
(Hons)

Sept 2022 – Present | Toronto, ON

CGPA: 3.70 / 4.33 (3.6 / 4.0)

### INVOLVEMENTS

Backend Lead @ PACS  
Backend Engineer @ USSTM  
Web Developer @ TMUCSA

## COURSEWORK

### UNDERGRADUATE

Database Systems I •  
Operating Systems I • Discrete  
Structures • Data Structures •  
Algorithms • Intro to Software  
Engineering • Computer  
Security I • Computer  
Networks I