

DHANUSH BAJAJ

Software Developer

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PROFESSIONAL SUMMARY

Computer Engineering Technology graduate and software developer with hands-on experience building full-stack applications, backend services, and containerized platforms end to end. Proficient in Java, Python, JavaScript, and TypeScript across modern web frameworks including React, Next.js, and Jakarta EE, with practical DevOps experience in Docker, Kubernetes, and CI/CD pipelines. Has shipped multiple production-style projects integrating live third-party APIs, OAuth 2.0 authentication, and cloud AI services. Strong foundation in data structures, operating systems, networks, and clean, testable design, with a track record of owning features from loosely defined requirements through to deployment.

EDUCATION

Algonquin College

Computer Engineering Technology | GPA: 3.4 | Dean's List

Ottawa, ON

April 2025

TECHNICAL SKILLS

Languages: Java, Python, JavaScript (ES6+), TypeScript, C, C++, SQL, C#, PHP, Bash, R

Web & Frameworks: React, Next.js, Node.js, Jakarta EE (JEE), .NET, RESTful APIs, OAuth 2.0, HTML5, CSS3

DevOps, Cloud & Infrastructure: Docker, Kubernetes, CI/CD, GitHub Actions, Microsoft Azure (incl. Cloud AI APIs), Git/GitHub, Serverless, Build Automation

Backend & Systems: Microservices, Client–Server Architecture, Multithreading & Concurrency, Distributed Systems, Object-Oriented Programming

Databases: SQL, MySQL, Relational Database Design, Data Modeling, CRUD Operations

Practices & Methodologies: Unit & Integration Testing, Test-Driven Development, Continuous Integration, Software Design Patterns, Code Reviews, Agile/Scrum

PROFESSIONAL EXPERIENCE

Software Developer Intern

Sep 2024 – Apr 2025

Communications Security Establishment Canada (CSE)

- Built “Kyubes,” a Kubernetes-based platform to centrally deploy, manage, and monitor software tools across containerized service environments, improving deployment efficiency and reliability.
- Served as team lead, coordinating sprint priorities and owning features end-to-end — translating loosely defined requirements into complete, working solutions alongside the team.
- Built and maintained DevOps components — Docker containers, Kubernetes clusters, and CI/CD pipelines — to build, deploy, and operate the platform.
- Designed and wrote clean, modular, testable backend and front-end code using JavaScript, RESTful APIs, HTML5, and CSS3, following design patterns and team coding standards.
- Wrote unit and integration tests covering deployment logic and API endpoints, and participated in peer code reviews on GitHub to keep the codebase maintainable.

- Diagnosed and resolved bugs across container orchestration workflows and deployment pipelines to improve application stability, and authored technical documentation for deployment and system architecture.

TECHNICAL PROJECTS

Option Oracle — AI Options Trading Assistant

React · TypeScript · GitHub Actions · Finnhub API

- Built an end-to-end options-analysis web app in React and TypeScript that pulls live market data from the Finnhub API and generates structured pre-market and post-market reports, shipped as an installable PWA deployed on GitHub Pages.
- Architected framework-free, pure-function analysis engines behind a provider-abstraction interface, with a serverless GitHub Actions backend running scheduled scans and dispatching email (SMTP) and web-push (VAPID) alerts while keeping API keys server-side.

Uncover Bricks Ottawa — Real Estate Listings Platform

Next.js · TypeScript · OAuth 2.0

- Developed a real estate listings site with Next.js (App Router) and TypeScript featuring locality-grouped listings, multi-criteria filtering and sorting, photo-gallery detail pages, and a validated lead-capture form with honeypot spam protection.
- Integrated the CREA DDF (MLS) feed through a server-side OAuth 2.0 client-credentials flow and OData queries with hourly cache revalidation and automatic fallback to mock data modeled on the RESO Property schema.

Real-Time Cloud AI Speech-to-Text Application

Microsoft Azure

- Built a real-time application integrating Microsoft Azure Cognitive Services to transcribe live audio streams into text.

Multithreaded Turing Machine Simulator

Java

- Designed a multithreaded Java client-server application simulating a Turing machine, applying concurrency control and socket-based communication.

GoLite Compiler

C

- Implemented a compiler in C for the GoLite language, building lexical analysis, parsing, type checking, and code-generation stages.

Linux User-Provisioning Automation

Bash

- Wrote a Bash script to automate Linux user account provisioning and configuration, reducing repetitive manual setup.

OTHER EXPERIENCE

Assistant Manager

Sep 2022 – May 2026

Tim Hortons

- Led and scheduled shift teams, trained new staff, and oversaw daily operations and cash handling in a high-volume service environment.

Cashier

Mar 2026 – Present

Home Depot

- Delivered customer service and processed transactions accurately in a fast-paced retail setting.