

David Barrios

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EDUCATION

Bachelor of Science in Software Engineering

Sep 2021 - Expected Graduation: Apr 2026

University of Calgary

GPA: 3.8/4.0

Relevant Courses: Data Structures and Algorithms, Object-Oriented Principles, Operating Systems, Databases, Distributed Systems, Software Architecture, Software Testing, Network Systems

EXPERIENCE

Software Engineer Intern

May 2025 - Sep 2025

Versa Networks

Santa Clara, CA

- Built pre-deployment validation in a Java-based distributed update system, reducing node-level configuration failures and stabilizing production rollouts affecting millions of users
- Built advanced search filters for network policies and profiles using Java and PostgreSQL, enabling enterprise customers to manage 10K+ configurations with sub-second query times
- Consolidated redundant config data in PostgreSQL across device types, reducing schema bloat and enabling faster dev cycles for upcoming product releases
- Integrated Docker APIs with Kafka event streaming to monitor microservice health, cutting MTTD by 50% and improving uptime for distributed services used by millions

Software Developer Intern

Jan 2025 - May 2025

Verdi

Vancouver, BC

- Built backend data models in MongoDB and interactive React map markers to visualize IoT gateway and hardware statuses, reducing troubleshooting time by 25%
- Refactored RBAC middleware in Express.js to streamline authorization logic, enhancing maintainability and scalability of API endpoints
- Led Terraform module refactoring, eliminating code duplication and improving infrastructure maintainability and scalability across multi-region deployments
- Unified maintenance information of devices by introducing reusable React components on any device card improving troubleshooting time by 25%

Software Developer Intern

Sep 2024 - Dec 2024

PureWeb

Calgary, AB

- Enhanced internal tools and TypeScript SDK to increase fault-tolerance in workflows, enabling seamless streaming and broadcasting of game models to 100,000+ concurrent users
- Resolved bugs in AWS Lambda CDN workflows, enhancing the reliability and robustness of distributed systems across 27 servers worldwide
- Built Go-based monitors for containers, and Redis health, integrated with Datadog via Terraform to improve system reliability and incident response times
- Integrated Playwright with GitHub Actions for end-to-end testing, reducing CI/CD sanity testing from 1 day to 1 hour and improving test coverage for rapid feature deployment
- Developed GraphQL Lambda resolvers to streamline customer support by integrating context data from CLI and web application model uploads into backend databases

EXTRACURRICULARS

Software Developer

Apr 2024 - Present

University of Calgary Solar Car Team

Calgary, AB

- Developed a real-time telemetry website for monitoring the vehicle systems health and battery interfaced with a C++ to TypeScript backend using MQTT
- Led the development of a real-time map feature for vehicle tracking, incorporating automatic GPS-based lap counting, gyroscope integration, and intermittent packet loss handling

SKILLS

Languages: Java, JavaScript, TypeScript, C++

Frameworks & Libraries: Spring, JPA, GraphQL, React, Node.js, Express.js, Redux

Databases: PostgreSQL, MySQL, Redis

Tools: Amazon Web Services (AWS), Google Cloud Platform (GCP), Kubernetes, Apache Kafka, Terraform, Git, Docker, Linux

Testing: JUnit, Jest, Selenium, Playwright, Chaos Monkey

Frontend/Web: HTML, CSS, SASS, Bootstrap