

# ROHIN AULAKH

Vancouver, BC | raa93@sfu.ca | (778) 513-9586 | LinkedIn | Portfolio

## EDUCATION

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### Simon Fraser University

B.Sc. Computer Science | GPA: 3.63

Sept 2023 – Present

Burnaby, BC, Canada

- **Relevant Coursework:** Data Structures and Algorithms, Systems Programming, Object-Oriented Programming, Computer Networks, Database Systems, Mobile Programming, Artificial Intelligence

## TECHNICAL SKILLS

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**Languages:** Python, JavaScript, C++, C, TypeScript, Java, Kotlin, SQL

**Frameworks & Libraries:** React, Node.js, FastAPI, REST APIs, PyTorch, OpenCV, Ultralytics

**Development Tools:** Git, Docker, Firebase, Supabase, Linux

## PROJECTS

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### Nodus | GitHub

React · TypeScript · Tailwind CSS · Gemini API · Chrome & Firefox Extension SDK

- Developed and published a cross browser (Chrome/Firefox) extension using React and TypeScript transforming articles into interactive concept graphs with node hierarchies, relationships, and summaries via the Gemini API.
- Designed prompt engineering pipelines for LLM based concept extraction and implemented dynamic graph rendering with persistent state for real time interaction.

### Neighborhood News | GitHub | Website

TypeScript · Python · FastAPI · Supabase · GitHub Actions · Railway

- Built a full-stack geospatial platform during XHacks 2026 using TypeScript, Python, and FastAPI to visualize city events with real-time map-based filtering.
- Designed and implemented an automated ETL pipeline integrating Vancouver Open Data APIs into a PostGIS-enabled PostgreSQL Supabase database with idempotent upserts.
- Optimized geospatial queries with indexing and developed RESTful APIs for efficient, scalable data retrieval, with daily updates through GitHub Actions.

### OpenCourt | GitHub | Website

Kotlin · XML · Android SDK · Firebase DB · Google Maps SDK

- Developed and shipped a Kotlin-based Android mobile app in a four-person team, enabling real-time, crowd-sourced basketball and tennis court availability.
- Implemented live data sync, user authentication, proximity-based check-in/out, and map-based interactions via Google Maps SDK and Firebase, supporting concurrent users with court data across Burnaby and Vancouver.

### ERA - ML Computer Vision System | GitHub

Python · YOLOv8 · OpenCV · PyTorch · Ultralytics

- Built a real-time computer vision system using YOLOv8, PyTorch, OpenCV, and Ultralytics to detect and track in-game objects in Clash Royale, maintaining accurate state representation for live decision-making.
- Achieved 0.83 mAP@50 and 0.81 precision on testing dataset, allowing for live gameplay labelling at 15 FPS; developed within 24 hours in a 4 person team during StormHacks 2025.

## WORK EXPERIENCE

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### Mirani Homes

Assistant Contractor

Jun – Sept 2023

Vancouver, BC, Canada

- Coordinated with city inspectors and construction crews to secure permits and resolve compliance issues.
- Identified and resolved on-site issues while helping pickup and delivery of materials, ensuring progress on various projects.