# Ansh Tiwari

Burnaby, BC | 672-558-1516 | ata185@sfu.ca github: Ansh<br/>Tiwari | linkedin: ansh-tiwari

#### Education

# Simon Fraser University — BASc in Computing Science

Jan 2023 - Present

Burnaby, BC

Technical Foundations: Software Engineering, Systems Programming, Data Structures, Networking, Databases

#### Technical Skills

Languages: C, C++, Java, TypeScript, JavaScript, Python

Frameworks & Tools: React, Spring Boot, Node.js, Express, Android Studio, Firebase, Git, Docker, Linux

Databases: PostgreSQL, MongoDB, SQLite

Concepts: REST APIs, OOP, MVC Architecture, Data Structures & Algorithms, Socket Programming, CI/CD

# Technical Projects

### FAM App — Cross-Platform Music Application

Apr 2025

React Native, Spring Boot, MongoDB

Full Stack Developer

- Developing music streaming app integrating Spotify and YouTube APIs for unified playback experience
- Implemented secure 2FA authentication system and personalized user dashboards with playlist management
- Architected RESTful backend with Spring Boot; storing user profiles and track metadata in MongoDB Atlas
- Designed responsive React Native UI with cross-platform compatibility for iOS and Android devices
- Planning AI-powered song recommendations, real-time chat functionality, and friend-based collaborative playlists

#### Rizzervit Website — Movie Booking Platform

Oct 2024 - Dec 2024

Spring Boot, PostgreSQL, JavaScript

Scrum Master & Full Stack Developer

- Built full-stack movie booking platform with dynamic seat selection, user authentication, and profile management
- Integrated Google Maps API to dynamically display location-based theaters with real-time availability
- Designed RESTful backend using Spring Boot with PostgreSQL for persistent data storage and session management
- Created responsive frontend interface using HTML, CSS, and vanilla JavaScript for enhanced user interactivity
- Led 4-member Agile team; coordinated sprints, managed GitHub workflows, and conducted peer code reviews

#### Territory Control Game — Multiplayer Strategy Game

Feb 2023 - Apr 2023

JavaFX, Socket Programming

Developer

- Developed real-time multiplayer JavaFX game where teams compete to capture sequential tiles on a grid
- Implemented socket networking infrastructure for synchronized two-player gameplay over local area network
- Designed game logic with turn-based mechanics and territory control algorithms for competitive gameplay
- Optimized game state management using multithreaded event handling and efficient client-server messaging

### Unix Shell Clone — Systems Programming Project

Sept 2024

C, Linux

Developer

- Developed Unix shell supporting I/O redirection, background process execution, and command pipelines
- Implemented core OS-level features using fork(), exec(), and wait() system calls for process management
- Built command parsing engine to handle complex inputs with proper error handling and signal management
- Demonstrated proficiency in low-level memory management, process scheduling, and inter-process communication

### Volunteer Experience

#### SFU Computing Science Student Society (CSSS)

Jan 2024 - Present

 $Event\ Volunteer$ 

Burnaby, BC

- Coordinated hackathons, coding workshops, and co-op networking events for computing science students
- Collaborated with peers and faculty to promote student engagement and career development opportunities

# HelpAge International

Aug 2021

 $Volunteer\ Fundraiser$ 

New Delhi, India

- Organized donation campaigns supporting elderly care facilities under HelpAge NGO
- Developed interpersonal communication and event coordination skills through direct community outreach

## Interests & Activities

Leadership: VAL Challengers (NECC) Spring 2024 playoffs competitor — Member of CSSS and SFU Esports Club Interests: UI/UX Design, Hackathons (Hack the North 2025), Esports Analytics, Cloud Development, Open-Source