

# Tejal Simran Cheema

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[GitHub](#) | [LinkedIn](#)

I am a Software Engineering student with a strong foundation in Java and Object-Oriented Programming. I am experienced in building applications using React, TypeScript and Java, with a focus on clean code and maintainable designs. Am passionate about solving complex problems and expanding technical expertise through diverse projects.

## Education

**Bachelor of Engineering – Software Engineering**

*University of Victoria*

**Sept 2020 - Present**

*Victoria BC*

## Skills

**Programming Languages** Java | Python | C | TypeScript | JavaScript | SQL | HTML | CSS

**Tools & Frameworks** React | Git | Docker | Virtual Machines | JSON Server | ServiceNow

**Other Technical Skills** Regex | Shell Scripting | Linux | SDLC

**Corporate** Technical Writing | Documentation | UML Diagrams | Public Speaking |  
Time Management | Organization

## Experience

**BC Ministry of Citizen Services**

**Sept 2022 - April 2023**

*Security Coop*

*Victoria BC*

- Designed and implemented two apps in ServiceNow: PDF Generator App and a Mobile App
  - Developed custom features for improved user experiences, replacing legacy processes with modern solutions
  - Applications are actively used by security professionals in the BC Government
- Delivered technical documentation for the PDF Generator App and trained end-users on functionality
- Created and executed test cases to ensure production-ready code quality

## Notable Projects

**Modern Tetris – Personal Project**

- Built a Tetris game in Java using Swing for the GUI and threads for real-time responsiveness
- Applied the MVC architecture pattern and developed a custom EventDispatcher for efficient event handling
- Optimized game performance with creative solutions for space, time, and memory efficiency

**Medical Information System – University Course Project**

- Prototyped a patient management system using JSON Server for real-time database operations
- Applied software design patterns (Factory, Singleton, Decorator, etc.) to improve modularity and maintainability
- Created UML diagrams (Class, Sequence, DFD, etc.) and maintained a GitHub wiki as a technical resource
- Designed and implemented a real-time patient queue system and a ticketing system for issue tracking

**Toxicology Predictions – UVic AI Club**

- Developed neural networks using TensorFlow and implemented SVMs with Scikit-learn for toxicity prediction
- Analyzed dataset distributions and visualized key performance metrics, including Precision, Recall, F1-score, and PR-AUC
- Applied techniques to handle data imbalance, such as dimensionality reduction (PCA, LDA) and resampling (SMOTEENN)