Gnanavel Premnath

New Westminster, BC | gpa21@sfu.ca | +1(604)-722-3592 | github.com/gprem09 | gnanavelpremnath.com

EDUCATION

- **Simon Fraser University** Burnaby, BC
  Bachelor of Science in Computing Science *Sept. 2020 – July. 2025 (expected)*

TECHNICAL SKILLS

- **Languages:** C, C++, Java, HTML, CSS, TypeScript, JavaScript, SQL, PHP, Python, Matlab
- **Frameworks/Tools:** Angular, React, NextJS, NodeJS, Express, MongoDB, Bootstrap, AJAX, Tailwind CSS
- **Others:** Git, Google Cloud, LaTex, Notion, Figma, Adobe Softwares

PROJECTS

Fullstack Web Development | TubeTalk **MEAN, TMDB API, GCP**
Multimedia Review Platform *Sept. 2022*

- Designed and deployed a multimedia review platform with **MEAN stack** to enhance user engagement with movie and TV show critiques.
- Integrated **TMDb API** with Node.js for data retrieval on movies/TV shows and created tag-based user searches for specific genres.
- Implemented **JWT** (JSON Web Tokens) for user authentication and **CRUD** for user management.
- Hosted the application to **GCP** (Google Cloud Platform) to ensure robust and scalable performance.

Web Development | Pig Report **Angular, Leaflet API**
Angular Project *Mar. 2021*

- Designed a dynamic **Angular web application** enabling the public to efficiently **report** and **track** missing pigs, providing benefits through interactive engagement and functionality.
- Implemented **CRUD** functionality, and employed **JSON** libraries and **REST APIs** to manage the database hosted on a web server.
- Incorporated **Leaflet maps API**, enabling users to sort reports, interact with **geographical markers**, and gain a comprehensive view of pig sightings.
- Designed user-centric forms for streamlined report submissions, complemented by intuitive feedback mechanisms for errors or incorrect inputs, ensuring a seamless user experience.

2d Arcade Game | Spirit Experiment **Java, Maven, Junit, Junit.jupiter**
Group Project (Software Development) *Sept. 2021*

- Led a team of four in the creation of a **2D arcade game**, utilizing **Java Swing** and **Graphics2D** to craft a visually engaging and responsive game engine.
- Structured a modular entity system using **polymorphism** and **inheritance**, with advanced **collision detection** for dynamic and static entities.
- Leveraged **JUNIT** and **junit.jupiter** for comprehensive **unit testing**, validating game logic and mechanics, and ensuring a bug-free gaming experience for users.
- Employed **Agile Scrum techniques** such as sprint planning, daily stand-ups, and retrospectives to manage the project, resulting in efficient workflow.
- Facilitated a **collaborative environment** that encouraged pair programming, code reviews, and continuous integration, bolstering team skill development and product quality.

RELEVANT COURSE WORK

- Data Structures
- Algorithm Analysis
- Discrete Mathematics
- Database Management
- UI/UX design
- Software Methodology
- Computer Architecture
- System Programming