

Harmandeep Singh

SOFTWARE ENGINEERING/COMPUTER SCIENCE STUDENT

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"The more we value things outside our control, the less control we have."

Summary

Motivated software engineering student with a strong foundation in C++, HTML, CSS, JavaScript, JAVA, and Python. Proficient in developing web-sites and Software solutions from scratch. Passionate about learning and applying new technologies. Seeking Industry Work to further hone my skills and leverage my software solutions to address real-world challenges.

Relevant Experience

Freelance Work

Melbourne

PRIVATE

Jun. 2023 - current

- Handling clients, manage expectations, setting reliable milestones and communicate regularly.
- Building simple user-friendly HTML and C++ websites
- Implementation of JavaScript to further enhance functionality and code readability

Minecraft MazeMaster: Immersive Maze Generation and Solving

Melbourne

PROJECT

Oct. 2023 - Nov. 2023

- Led a collaborative project focused on immersive maze generation and solving within the Minecraft gaming environment using the **high-level Spigot API** and **C++**.
- Coordinated group efforts by setting up and managing regular team meetings, ensuring effective communication, and keeping the project on track.
- Planned the project's course of action, including the integration of **recursive maze generation** and **right-hand follower** maze-solving methods.
- Designed and implemented **a modular and extensible structure** for random maze generation and solving, allowing for the addition of various algorithms in the future.
- **Managed resource allocation** and cleanup for maze objects within the Minecraft world after and during program use, ensuring a clean and predictable environment.
- Worked in **Ubuntu** and **VSCode** to create a user-friendly console-based interface for user input.

MovieInfoHub: Your Ultimate IMDb Companion

Melbourne

ONGOING PERSONAL PROJECT

Oct (20th) 2023 - Present

- Leading a personal project aimed at developing a user-friendly and efficient website using web scraping (with **Node.js**, **Playwright** and other related dependencies and the **TMDB API**).
- Utilizing web scraping techniques to extract relevant data using consistent JS pathways.
- Designing and implementing a fast and responsive web interface that meets user expectations and demands.
- Managing ongoing development and improvements for the project to enhance the website's performance and user satisfaction (currently running tests and further implementation to reach desired vision).

Other

PERSONAL PROJECTS

2019 - 2023

- Coding Challenges: Solving coding challenges on platforms like **LeetCode** or **HackerRank**.
- Smaller web application that integrates with public APIs
- General Automation Scripts (repetitive tasks, file organization, data scraping, or report generation)
- Personal website (in the process of a redesign)
- simple 2d games/calculators

Skills

Back-end Programming Languages
Express, REST API
Node.js, Python, JAVA, OCaml, LaTeX
Punjabi, English, Hindi

Main Programming Languages
Java, C++, Python, Assembly

Web Development/Front End
HTML, CSS, JavaScript, React

Database Management/HTTP client
SQL, Thunder Client, Postman

Tools
Git, Visual Studio Code, Eclipse, Sublime Text

Operating System
Windows, Linux

Education

Royal Melbourne Institute of Technology (RMIT - City Campus)

Melbourne

2023 - 2026

- Studying B.S. in Computer Science/Software Engineering (Second Year)

Extracurricular/Personal

SCHOOL HOUSE CAPTAIN

2021 - 2023

- Successfully led and coordinated school house activities, charities and festivals
- Resolving house-related issues using creativity and adapting to the needs of others, a vital skill for troubleshooting in software engineering.
- Managing my responsibilities as a house captain while keeping up with academics, a critical skill in meeting project deadlines in the software industry

Coding Challenges (e.g LeetCode Weekly Contest)

PERSONAL

2022 - current

- Participate regularly in preparation for a hackathon
- To Enhance my programming and problem-solving skills. I love to use creative thinking and the ability to break down complex problems into smaller, manageable parts
- Coding challenges provide a continuous source of new problems to solve and allow you to stay intellectually engaged.
- Gain a competitive edge over my peers and are very fun to do

Piano

PERSONAL

2023 (march) - current

- I have a strong commitment and love classical pieces (especially by Beethoven) like Für Elise and Piano Sonata No. 14
- Still working towards building strong fundamentals

Calisthenics

PERSONAL

2018 - current

- An advocate for body-weight workout and the ability to build strength and flexibility for long-term health
- Favourite exercises include pull ups, push ups and handstands