

Harmandeep Singh

SOFTWARE ENGINEERING STUDENT



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| 🌐 <https://github.com/Harmanhrm>



Education

Royal Melbourne Institute of Technology (City Campus)

STUDYING B.S. IN SOFTWARE ENGINEERING - SECOND YEAR

2023 - 2026

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

PRIVATE

Jun. 2023 - current

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

MazeMaster: Immersive Maze Generation and Solving

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 managing regular team meetings, maintaining a **90% attendance rate** ensuring effective communication channels
- Planned the project, including the integration of **recursive maze generation** and **right-hand follower** maze-solving methods. resulting in **25% reduction in average solution time** compared to alternative algorithms (Random Walk, Depth-First Search(DFS), Breadth-First Search (BFS))
- Designed and implemented **a modular and extensible structure** for random maze generation and solving, prioritizing code readability and scalability
- **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. which received a **user satisfaction rating of 4.3/5**.

MovieInfoHub: Your Ultimate IMDb Companion

ONGOING PERSONAL PROJECT

Oct. 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.

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