# Harmandeep Singh

#### SOFTWARE ENGINEERING STUDENT

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## **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 websites 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.

# Relevent 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

JANUARY 10, 2024 HARMANDEEP SINGH · RÉSUMÉ