

# Muhammad Azreen Bin Muhamamd

Mobile: +65 80717375 Email: 2200581@sit.singaporetech.edu.sg

Website: [https://the1azreen.github.io/Digital\\_Resume/](https://the1azreen.github.io/Digital_Resume/)

## EDUCATION

Singapore Institute of Technology Bachelor of Applied Artificial Intelligence	Aug 2023 – May 2026 (expected)
Temasek Polytechnic Diploma in Computer Engineering	Apr 2016 – Feb 2020
Exchange Program Kumamoto University (Japan)	Feb 2019 – Apr 2019

## PROJECTS

SIT X HTX (Home Team Science and Technology Agency) 3D Reconstruction App For Fire Investigation <i>Develop a scalable, near real-time 3D post-fire scene reconstruction application</i> <ul style="list-style-type: none"><li>Utilization of 3D Gaussian Splatting (3DGS) for scene reconstruction for incomplete and damaged structures</li><li>3DGS can achieve near-real time performance, e.g. less than 1hr on top of the 3DGS scene captured using camera</li></ul>	Jan 2025 – Aug 2025
Anime Image Upscaling with Fine-Tuned Real-ESRGAN (M-ESRGAN) <i>Our goal is to find a new way to tune the R-ESRGAN model specifically for anime and anime upscaling tasks</i> <ul style="list-style-type: none"><li>Utilizing adversarial training to train the model to achieve parity of the upscale image to the source material.</li><li>Image augmentation by the decade of release of each anime medium to tune it for each generation of anime image quality.</li></ul>	Sep 2024 – Dec 2024

## WORK EXPERIENCE

SIT X HTX – Research Assistant <ul style="list-style-type: none"><li>Focus on 3D reconstruction and investigation of post-fire scenes</li><li>Develop a scalable, near real-time 3D post-fire scene reconstruction application</li></ul>	Jan 2025 – Aug 2025
Freelancer – Software Engineer <ul style="list-style-type: none"><li>Developed 3D VR software for educational use for student</li><li>Hand Interaction: Pick up, inspect, and interact with objects using HTC Vive controllers.</li><li>Teleportation System: Smooth movement with teleportation to avoid motion sickness.</li></ul>	Aug 2022 – Mar 2023
Aviation Virtual Pte Ltd – VR Developer <ul style="list-style-type: none"><li>Worked as a 3D VR programmer of various VR-related projects for clients in varying sectors.</li><li>Created a login system using text files(.JSON, .txt and .cs) as a database and integrate it on VR project</li><li>Implement trigger events as to the certain markers for the workers to practice on a task</li></ul>	Sep 2019 – Feb 2020

## SKILLS

- Coding Skill: C, C++, C#, Python, R, MySQL, Java, HTML, CSS, Quarto, Markdown
- Software Proficiency: R Studio, Colab/ Kaggle, Microsoft Office, VS Studio, Power Bi
- Certificates: AI Singapore, AI4I Literacy in AI & AI4I Foundations in AI

## HOBBIES & INTERESTS

- Social, Ethics, Transformative Content (Video Essays), Technical Writing, Video Gaming and Video Game Analysis.
- Machine Learning, LLM, Deep learning, Computer Vision.