|  |  |
| --- | --- |
| **Muhammad Azreen Bin Muhammad**  Email: 2200581@sit.singaporetech.edu.sg | |
| **Website:** [**https://the1azreen.github.io/Digital\_Resume/**](https://the1azreen.github.io/Digital_Resume/) **/** [**https://www.linkedin.com/in/muhammad-azreen/**](https://www.linkedin.com/in/muhammad-azreen/)  **EDUCATION** | |
|  | |
| **Singapore Institute of Technology** | **Aug 2023 – May 2026** |
| |  |  | | --- | --- | | **Bachelor of Applied Artificial Intelligence** | **(expected)** | | |
|  | |
| **Temasek Polytechnic** | **Apr 2016 – Feb 2020** |
| **Diploma in Computer Engineering** | |
| **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** | **Jan 2025 – Aug 2025** |
| *Develop a scalable, near real-time 3D post-fire scene reconstruction application* | |
| * Utilization of 3D Gaussian Splatting (3DGS) for scene reconstruction for incomplete and damaged structures incomplete and damaged structures * 3DGS can achieve near-real time performance, e.g. less than 1hr on top of the 3DGS scene captured using camera | |
|  | |
| **Anime Image Upscaling with Fine-Tuned Real-ESRGAN (M-ESRGAN)** | **Sep 2024 – Dec 2024** |
| *Our goal is to find a new way to tune the R-ESRGAN model specifically for anime and anime upscaling tasks* | |
| * Utilizing adversarial training to train the model to achieve parity of the upscale image to the source material. * Image augmentation by the decade of release of each anime medium to tune it for each generation of anime image quality. | |
|  | |
| **WORK EXPERIENCE** | |
|  | |
| **SIT X HTX – Research Assistant** | **Jan 2025 – Aug 2025** |
| * Focus on 3D reconstruction and investigation of post-fire scenes * Develop a scalable, near real-time 3D post-fire scene reconstruction application | |
| **Freelancer – Software Engineer** | **Aug 2022 – Mar 2023** |
| * Developed 3D VR software for educational use for student * Hand Interaction: Pick up, inspect, and interact with objects using HTC Vive controllers. * Teleportation System: Smooth movement with teleportation to avoid motion sickness.   **Aviation Virtual Pte Ltd – VR Developer**  **Sep 2019 – Feb 2020**  • Worked as a 3D VR programmer of various VR-related projects for clients in varying sectors.  • Created a login system using text files(.JSON, .txt and .cs) as a database and integrate it on VR project | |
| • Implement trigger events as to the certain markers for the workers to practice on a task | |
| **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, Unity, Unreal, Godot, Tableau  • Certificates: AI4I Literacy in AI, AI4I Foundations in AI, Google AI Essentials, Google Business Intelligence, Google Advanced Analytics  **HOBBIES & INTERESTS** | |
| • Social Ethics, Transformative Content (Video Essays), Technical Writing, Video Gaming and Video Game Analysis.  • Machine Learning, LLM, Deep Learning, Computer Vision, Video & Realtime Upscaling, VR/AR and Chain of Thought | |