Muhammad Hazimi Yusri

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Education

University of Southampton

MEng Electrical and Electronics Engineering, First Class Honours

Technical Skills

VR/XR: Unity, Unreal Engine, Godot 4, OpenXR, SteamVR SDK, Spatial Audio Languages: Python, C++, C#, C, Java, JavaScript/HTML/CSS, GDScript, MATLAB, Shader Programming Web/Cloud: Next.js, Cloudflare deployment, Itch.io distribution, Chrome Extensions DevOps: Docker, DevContainers, Git, GitLab, VSCode, Claude Code, CI/CD pipelines Hardware: VR HMDs (Quest Pro, Pico 4, Beyond), Raspberry Pi, Arduino, ESP32 Platforms: Published XR applications, open-source contributions, comprehensive documentation

Relevant Experience

University of Southampton

Research Assistant

- Implemented VR scene rendering in Unity with spatial audio, including custom audio recording system
- Refined ML pipeline for scene reconstruction, focusing on EdgeNet360 adaptation for 360° image processing
- Developed acoustic evaluation methods using MATLAB for room impulse response measurements
- Utilized modern development workflows with DevContainers for reproducible environments

Personal Project

DIY Stereo Camera System

- Developed low-cost SBS capable camera system for lifelogging and video capture
- Utilized VR 6 DOF environment for customizable and adaptable 3D content browsing
- O Designed open-source system (Hardware: Raspberry Pi 5; Software: Godot 4) with comprehensive documentation
- Deployed project documentation using modern web technologies and Cloudflare
- Stereo Processing Pipeline Demo: https://youtu.be/AcH3xw2EPmc
- VR Application Demo (Godot 4): https://youtu.be/MtZ8gLKz6AU

Personal Project

- SlimeVR Open-Source IMU Full Body Tracking
- Integrated 7 BMI160 sensors with Wemos D1 Mini for VR full-body tracking
- Utilized 3D modeling and printing to adapt case designs for different battery sizes
- O Contributed to open-source VR tracking ecosystem with modern development practices

Additional VR-Related Projects

FPV Drone: Built AOS 5 drone with DJI O3 air unit, exploring low-latency video transmission Media Server: Implemented Plex and Immich for 3D movie streaming to VR headsets via DLNA Portfolio: Created immersive portfolio showcase using Next.js with XR web technologies

Development Environment

Modern Workflow: VSCode with DevContainers, Claude Code for Al-assisted development, Git workflows Deployment: Experience with Cloudflare for web deployment and CDN optimization

Additional Information

Work Rights: Full UK work rights (Graduate visa valid until 2027) Availability: Immediate Location: Flexible - Southampton or Liverpool preferred

June-Aug 2024

Sep 2023-Apr 2024

May-Sep 2023



2021-2025