

MUHAMMAD IRFAN RUSYDI BIN RAZALEIGH

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EDUCATION

Universiti Teknikal Malaysia Melaka

Bachelor of Information Technology (Game Technology)

Cumulative GPA: 3.69/4.0; Dean's List Oct 2022 – Aug 2025

Relevant Coursework: Artificial Intelligence for Games, Game Engine Development, Computer Game Programming, Human Computer Interaction, Multi-platform Game, Web Game Development, Game Physics, Motion Graphics, Information Technology Security, Interactive 3D Animation, Computer Organisation and Architecture, Database

Ayer Keroh, Melaka

Expected Mar 2026

Universiti Teknologi MARA

Foundation in Engineering

Cumulative GPA: 3.67/4.0

Dengkil, Selangor

Jul 2021 – Aug 2022

WORK EXPERIENCE

CTRM Aero Composites, DRB HICOM

Design Engineering Intern | XR / Digital Twin Developer

- Built forklift simulation & mission-based training system (C++ & Blueprints)
- Integrated real-world hardware (Logitech wheel + Arduino controls) into VR
- Implemented Mixed Reality (Meta Quest3) with passthrough & hand tracking
- Managed 3D pipeline (Blender → Unreal Engine) & VR deployment (APK)

Batu Berendam, Melaka

Oct 2025 – Mar 2026

Faculty of Information and Communication Technology, Universiti Teknikal Malaysia Melaka

Technical Assistant (Rakan Teknikal FTMK)

- Maintained 10+ faculty lab computers, ensuring 95% operational uptime by tracking and reporting issues promptly.
- Facilitated event setup for 3+ faculty programs, coordinating with 20+ stakeholders to ensure smooth execution.

Ayer Keroh, Melaka

May 2025 – Dec 2025

PROJECTS

CTRM Factory Digital Twin (VR) | Unreal Engine, Industry Collaboration

Oct – Mar 2026

Developed a VR-based digital twin of CTRM's aerospace factory for immersive training and operational visualization.

- Built a high-fidelity 3D factory environment with interactive VR systems in Unreal Engine.
- Enhanced TVET & STEM learning through real-world CTRM aerospace factory simulation.
- Strengthened academia-industry collaboration, serving as a foundation for future Industry 4.0 applications.

Dynamic AI-Driven NPCs with Real-Time Adaptive Conversations | UE5

Jun – Aug 2025

AI-driven NPCs with real-time text-to-speech and lip-sync using Unreal Engine 5, Python, and C++

- Integrated local LLM (Ollama) with NVIDIA Riva TTS for NPC dialogue and audio playback.
- Automated facial animation via Audio2Face for real-time lip-sync and expression.
- Managed multi-language programming pipeline combining C++, Python, and UE5 Blueprints.

BubGirls

Jan 2025

3D Isometric adventure mobile game for Global Game Jam 2025 submission.

- Created core gameplay mechanics and programmed animations in Blueprint in Unreal Engine 5.
- Monitored team workflow, coordinating 4 members to ensure all tasks met 48-hour deadlines.

Legasi – A Gamification of Malay-Cultured Pencak Silat and Empu's Blacksmithing

Mar – Jun 2022

An indie 3rd person Action game.

- Designed a gamified combat experience based on authentic Pencak Silat technique.
- Developed interactive inventory and crafting systems in Unity, enabling players to forge 1 fully functional keris.

Perlin Noise Visualization with Audio Controls

Jan 2025

Web-based audio virtualization submitted for GitHub Copilot Challenge: Transitions and Transformations.

- Built a real-time Perlin noise visualization usingshader in Three.js, fully synchronized to audio playback.
- Implemented 10+ adjustable visual parameters, including color palettes, bloom intensity, and noise speed.

ACTIVITIES

Interactive Media Club, FTMK	Ayer Keroh, Melaka
President of Club	Jun 2024 – Jun 2025

- Led and co-led 7+ events, including Industrial Visit to Larian Studios, Visual Effect Workshop, IMC Let’s Meet Up, Industrial Visit to Warnakala Studios, and Game Development Workshop.
- Administered event planning and budgeting, coordinating 11 cross-courses team members with 95% on-schedule execution.

Faculty of Information and Communication Technology Student Society	Ayer Keroh, Melaka
Committee Member	Jun 2024 – Jun 2025

- Facilitated in organizing 5+ major faculty events, including D’FTMK Tech Day 2024 and Majlis Apresiasi 2024, attended by 100+ participants each.
- Coordinated event logistics, managed VR demonstration setups, and prepared 10+ lab PCs for workshops.
- Served as an usher and technical assistant for large-scale programs, including the Axiata event with 100+ attendees.

ADDITIONAL

Technical Skills:C++,C#, Python, Unreal Engine 5, Unity, Blender, Visual Studio, CSS, HTML5, JavaScript, Three.js, OpenGL, Raylib, phpMyAdmin, MySQL, Github, Photoshop, After Effects, Software Development Life Cycle (SDLC)

Languages: Fluent in Malay and English

Certifications & Training: Introduction to Linear Algebra with MATLAB, MATLAB Onramp

Awards:

- Gold Award - Graduate Digital Invention, Innovation and Development 2025
- Industry Award - Graduate Digital Invention, Innovation and Development 2025
- Best Presenter - Graduate Digital Invention, Innovation and Development 2025
- Most Promising Young Presenter- Insan Junior Researcher International Conference 2020
- Silver Award - International Putra Innocreative Carnival In Teaching And Learning 2020
- Bronze Award - Creations de UiTM International Mega Innovation Carnival 2022