

WAI KIN MA, Kenji

Unity Game Developer (Technical Design)

+44 7575 856 616 | Surrey, UK (No Visa Sponsorship Required)

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PROFESSIONAL SUMMARY

"Analysis → Creative Engineering → Visual Verification."

I am a Unity Game Developer who speaks both "Code" and "Design." My core strength lies in Technical Design—bridging the gap between abstract gameplay concepts and robust C# systems.

With a background in delivering high-stakes commercial installations, I specialize in building modular Gameplay Architectures that are not only scalable but also deliver a responsive and satisfying player experience.

SKILLS

Core Engineering & Architecture:

Unity (C#) | **ScriptableObject Architecture** | Finite State Machines (FSM) | Event-Driven Systems | Dependency Injection | Object-Oriented Programming (OOP).

Technical Design:

3C Implementation | **Rapid Prototyping** | UI/UX Logic |

Visual Feedback & Polish (VFX, Screen Shake, Hit-stop) | Animation State Machines

Platform Specialization:

WebGL (Optimization) | Mobile (iOS/Android) | **AR (AR Foundation / Niantic ARDK)**

Full-Stack & Integration:

Gameplay Telemetry | PHP | MySQL | REST APIs | JSON | Git | Data Logging for Game Balance

Languages:

English (Proficient) | Japanese (Fluent) | Cantonese (Native)

WORK EXPERIENCE

Unity Game Developer (Technical Design) | Acting Technical Lead

Gamecrafters' Collective

Remote, UK | Oct 2025 – Present

- **Leadership & Project Turnaround:** As Acting Technical Lead for a cross-functional team of 8, successfully navigating high-pressure development cycles by realigning the roadmap and implementing risk mitigation strategies to ensure a viable vertical slice delivery under tight constraints.
- **Production & Cross-Team Coordination:** Managed full-cycle production by authoring comprehensive development documents and task trackers. Facilitated seamless communication across disciplines, continuously evaluating milestone progress against remaining time to execute dynamic programming pivots and rapid problem-solving.
- **Scope & Production Management:** Spearheaded feature triage and dependency mapping to maintain production velocity. Effectively balanced technical requirements with team bandwidth.
- **Multiplayer Architecture:** Architected and implemented core synchronization logic for a multiplayer co-op title using Unity Netcode for GameObjects and Unity Relay, facilitating robust peer-to-peer connectivity and real-time data syncing.

Unity Game Developer (Technical Design)

Independent

Remote, UK | Nov 2022 – Present

Operated as an independent developer and freelance programmer, managing full-cycle game development and collaborating with international indie studios targeting PC/Steam releases.

- **International Co-development (Japanese Indie Team)**

Leveraged fluent Japanese to facilitate seamless communication with the remote team.

- **Cross-border Engineering:** Collaborating remotely with a Japanese indie team to engineer gameplay mechanics and scalable C# systems for an upcoming Steam title.
- **Vision Translation & Execution:** Collaborated directly with the Game Director to evaluate the technical feasibility of their creative direction. Successfully translated high-level concepts into engine reality by integrating custom VFX triggers, camera shakes, and animation states to align with the intended combat feel and elevate overall impact.

- **Solo Commercial Development & Cross-Platform Prototyping**

- **Full-Cycle Architecture:** Architecting scalable core game loops and modular systems (e.g., custom state machines, data-driven UI) for an in-development commercial PC/Steam title, ensuring strict version control and production discipline.
- **R&D & Rapid Prototyping:** Engineered and validated diverse technical prototypes across multiple platforms (WebGL, AR Foundation, Mobile/PC). Rapidly iterated on interaction designs, mechanics, and hardware constraints to prove gameplay viability prior to full-scale production.

Unity Game Developer

Dragon Creative Media Limited

Hong Kong | Sep 2021 – Jun 2022

Projects History:

- **Harry Potter: Christmas in the Wizarding World (Interactive Installation)**

Key Gameplay Engineer for this official licensed event deployed at Hong Kong major shopping mall - Magabox

- **Algorithm Design & Constraint Solving:** Engineered a predictive offset algorithm to simulate precise wand-tip tracking using standard Kinect hand joints. This solution overcame hardware limitations (tracking small props) and eliminated the need for fragile external sensors, ensuring high durability for public use.
- **Visual FX & Polish:** Implemented high-fidelity particle systems and real-time UI feedback

- **Candy Catcher : Easter Chill (WebGL)**

Key Gameplay Engineer for event deployed at Hong Kong major shopping mall - CK Malls

- **Frontend & Optimization:** Engineered a mobile-optimized 2D puzzle game framework; balanced animation rhythm and visual fidelity under tight browser performance budgets.
- **Backend & Data Analytics:** Designed a **PHP/MySQL** architecture to handle prize pool distribution. Implemented **gameplay telemetry** (logging metrics like difficulty patterns and session times) to monitor live game balance and validate player engagement.

ADDITIONAL EXPERIENCE

Kitchen Staff

Hachi Japanese BBQ Restaurant

London, UK | Feb 2023 – Present

EDUCATION

Higher diploma of Computer Game Development | Sep 2017 - Jul 2019

The Chinese University of Hong Kong, School of Continuing and Professional Studies