

Key Zhao

Gameplay Programmer with 5+ years of experience developing PC, console, and mobile games using Unreal Engine 5, C++, Unity, and C#. Experienced in gameplay systems, multiplayer, UI, optimization, and cross-platform development.

Tokyo, Japan

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EXPERIENCE

Blast Edge Games, Tokyo, Japan — Gameplay Programmer (UE5)

Jul 2024 – Present

Beast of Reincarnation

Platforms: Steam, PlayStation 5, Xbox Series X

- Developed and polished gameplay events, cinematic sequences, and interactive gameplay systems.
- Implemented UI features and fixed gameplay-related bugs.
- Improved character behaviors, animations, and camera presentation.
- Implemented and tuned audio, environmental effects, and interactive objects.
- Addressed progression blockers, collision issues, and playtest feedback.
- Technologies: Unreal Engine 5, C++, Hexa, Perforce

HYKE: Northern Light(s)

Platforms: Steam, PlayStation 5, Nintendo Switch, iOS, Android

- Resolved gameplay and character-related issues to improve gameplay quality and stability.
- Optimized memory usage on iOS.
- Optimized Game Thread performance on Nintendo Switch.
- Technologies: Unreal Engine 5, C++, Perforce

Freelance Game Developer, Tokyo, Japan

Mar 2023 – Jun 2024

GUARDS!

Platforms: Steam

- Performed gameplay QA and debugging.
- Managed Japanese localization.
- Worked in a 4-person multiplayer indie team.
- Technologies: Unreal Engine 5, C++

Danmaku Shooting Game (Cancelled)

SKILLS

Languages: C++, C#, Python, HTML + JavaScript + TypeScript, Java

Game Engines: Unreal Engine 5, Unity

Gameplay: Character Systems, AI, Combat, UI, Multiplayer

Graphics: OpenGL, GLSL

Tools: Perforce, Git, Rider, Visual Studio, Visual Studio Code

Platforms: Windows, PS5, Nintendo Switch, iOS, Android

AWARDS

盛り上がるで賞, **24th Unreal Engine 5 Petit Contest (第24回 UE5ぷちコン)(2025)** — Hook Racer

Audience Choice Winner & Best XR Game, Global Game Jam Hong Kong 2025 — Shadow Bubble: Hide and Seek Chaos

Best Original Game, Global Game Jam Hong Kong 2022 — Blite

Bronze Award, CityU App Innovation Contest (2018) — Developmental Coordination Disorder Evaluation and Training App

Platforms: Windows

- Developed gameplay systems, combat mechanics, enemy AI, and UI.
- Managed project scheduling and performed debugging.
- Technologies: Unity, C#, Git

Doki Doki House

Platforms: iOS / Steam

- Developed an internal tool that converted Excel scripts into Ren'Py code.
- Improved the visual novel production workflow.
- Contributed to a title with over 50,000 iOS players.
- Technologies: Python, Ren'Py

Realm of Alters Limited (Ember Entertainment), Hong Kong — Gameplay Programmer (Unity)

Mar 2022 – Feb 2023

Apeiron

Platforms: Steam, Epic Games Store

- Developed gameplay systems, combat mechanics, card systems, and enemy AI.
- Implemented multiplayer synchronization using Socket.IO.
- Mentored junior programmers and participated in technical interviews.
- Assisted with project planning and scheduling.
- Technologies: Unity, C#, Git

Feeling Game Company, Hong Kong — Gameplay Programmer (Unity)

Jun 2020 – Feb 2022

Every Hero

Platforms: iOS, Android

- Developed gameplay systems, combat mechanics, equipment systems, and UI.
- Optimized game performance.
- Performed QA, localization, and advertisement implementation.
- Contributed to a game with 1M+ players and an App Store Action Games #2 ranking.
- Technologies: Unity, C#, Git

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Platforms: Steam

- Developed internal production tools.
- Built random character voice generation and singing automation tools.

CERTIFICATIONS

Fundamental Information Technology Engineer Examination (FE), Japan (2026)

Information Security Management Examination (SG), Japan (2025)

Japanese-Language Proficiency Test (JLPT) N1 (2022)

LANGUAGES

Cantonese: Native

Mandarin: Native

English: Business Level

Japanese: JLPT N1

- Technologies: Unity, C#, Git

EDUCATION

The Hong Kong Polytechnic University, Hong Kong — Master of Science in Information Technology

Sep 2018 – Jun 2020

- Specialized in Artificial Intelligence and Machine Learning.
- Completed coursework in Game Design and Game Development.

Chu Hai College of Higher Education, Hong Kong — Bachelor of Science (Honours) in Computer Science

Sep 2014 – Jun 2018

- Studied computer science fundamentals, including algorithms, data structures, object-oriented programming, databases, and software engineering.

PERSONAL GAME PROJECTS

Hook Racer — UE5, C++

7-week solo game jam project. Designed and programmed all gameplay systems, game mechanics, pixel art, and music. Winner of the 盛り上がるで賞 at the 24th Unreal Engine 5 Petit Contest.

Shadow Bubble: Hide and Seek Chaos — UE5, C++

7-day Global Game Jam project. Developed gameplay systems for a two-player asymmetric multiplayer game. Winner of the Audience Choice Award and Best XR Game at Global Game Jam Hong Kong 2025.

The Path of Osu— UE5, C++

Solo-developed third-person action-adventure prototype featuring combat and puzzle gameplay. Designed and implemented all gameplay systems.

Blite— Unity, C#

2-day Global Game Jam project. Developed gameplay programming in a three-person team. Winner of the Best Original Game Award at Global Game Jam Hong Kong 2022.

Hero Race — Warcraft III World Editor, JASS

Long-term personal project (2011–2022). Designed and programmed a multiplayer custom map with original gameplay systems and level design.