Bohan Cheng

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## **Professional Summary**

Game developer with over 9 years of experience in Unity and a strong background in Unreal Engine. Contributed to multiple shipped titles, including indie and team-based projects. Comfortable working across gameplay systems, AI, multiplayer networking, and scalable architecture. Enjoy building meaningful player experiences and practical tools, with a focus on collaboration, learning, and technical quality.

### **Technical Skills**

## **Game Engines:**

Unity (9 years: 4 professional, 5 indie) Unreal Engine 5 (5 years indie) Godot (2 years prototyping)

### **Programming:**

C#, C++, Python, JavaScript

#### AI/ML:

OpenAl APIs, LLM fine-tuning, Vector Databases (Al models/Retrieving) TTS/STT, Stable Diffusion, Trellis, Mixamo (Al asset pipelines)

### Multiplayer & Networking:

Unity 6 Netcode, Photon, AWS Dedicated Servers (Networking and back-end development)

### **Tools & Pipelines:**

Blender, Perforce, GitHub, Streamlit (Project management/Asset creation/Tool development)

### **Specializations:**

Gameplay Design, Multiplayer Networking, Optimization, Game Feel Design

## **Professional Experience**

## Full-Stack & Gameplay Programmer | Limtoo Tech Ltd. (Personal Startup) Mar 2024 – Present

- Created Al-powered SaaS tools using OpenAl APIs, achieving high accuracy in university program advising (Python, LLMs, vector DBs), Al learning APP, Al content generation app, Al personal planning APP, etc.
- Built 2D Multiplayer Shooter (Unity):
   Built team deathmatch with 4 weapon types, 3 character classes, and low-latency internet sync for up to 12 players.
- Built Dungeon RPG, currently in development (Unity):
   A dungeon-crawling RPG focused on exploration and steady progression. Created room generation algorithms and cross-platform save systems; integrated Al-generated 3D assets.
- Delivered freelance Front-Desk Billing Tool (Python/Streamlit), reducing client errors by 90% via Google Sheets for data storage for a costless operation and maintenance.

# Game Developer & UX Engineer | LuvBug Learning (BigFatBrainStorm Group) Aug 2021 – Feb 2024

- Shipped educational game with custom checkpoint system (Unity), enabling mini-games during core gameplay.
- Implemented AWS-backed networking for account/data sync; built AI behaviours for 3 villages and 4 mini-games.
- Developed Unity Editor tools: UI particle systems, sprite animators, and checkpoint systems.

## **Developer & Designer | ManyFrog Studio (Small Indie Team)** July 2020 – Feb 2023

- Solo shipped a 2D survivors-like & roguelike game on iOS & Android stores.
- Created over 8 different types of enemies and 3 boss fights, over 5 player characters and over 30 unique power-ups.
- Optimized performance for low-end devices.

## **Shipped Titles & Projects**

## **LuvBug Learning (Unity | Team Project)**

Award-Winning Emotional Health App for Kids (4–10 yrs) | Shipped 2023

- Built a "game-in-game" checkpoint system focused on empathy, curiosity, and problem-solving.
- Designed Al-driven NPC interactions for 3 aspirational worlds, using Behaviour Trees to model age-appropriate emotional responses.
- Integrated AWS Lambda for secure parent-child account syncing and progress tracking.
- Created custom Unity tools: dynamic UI adapters (for multilingual support) and particle systems to enhance engagement.
- Impact: Aligned with learning scientists to build core emotional-regulation mechanics, fostering resilience and academic success.

### **Cosmic Survival (Unity | Solo Dev)**

2D Roguelike | Shipped 2023

- Developed start-to-finish in 2 months; features endless enemy waves, stackable and unique power-ups, and adaptive boss fights with epic music and effects.
- Designed more than 5 unique player characters and over 30 stackable power-ups.
- Optimized performance for low-end devices (stable 60 FPS on Android/iOS).

### **Education**

## Game Programming Advanced Diploma (Dean's List)

George Brown College | Apr 2021

Built a custom C++ physics engine (collision detection, rigid body dynamics) and game engine (ECS architecture, DirectX 12/OpenGL renderer).

### Focus:

- Networked Games (AWS multiplayer server implementation)
- DirectX 12 & OpenGL Graphics (low-level rendering pipelines)
- Al Algorithms (Al pathfinding, behaviour trees and more)
- Gameplay programming (Unity with C#, Unreal Engine with C++ & Blueprint)