Jincheng HE

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Personal Profile

- **Career Objective:** Game Development, Game Level Design, Game Engine Development (C++)
- **Availability:** Available from September
- **About Me:** Expected graduation: Sep 2025, Responsible, Enthusiastic to learn, always willing to communicate

Skills

- **Programming Languages**
  - **2 years:** C++
  - **1 years:** C#, Java
  - **3 years:** Python, C
- **Technologies & Frameworks**
  - **Graphics & Game Dev:** DirectX 11, Unity Engine, Unreal Engine 5
  - **Tools & Others:** Houdini, Blender, Git

Education

Sept 2024 – Sept 2025　🔖 **University of Warwick** Master of Science - MS, Game Engineering
C++, Computer Graphics, Game Development

Sept 2020 – Jul 2024　🔖 **Hong Kong Baptist University** Bachelor of Science - BS, Computer Science and Technology
Operation System, Data Structure and Algorithm

Employment History

- **Jul 2022 – Oct 2022 | Intern, IT Department, BMW Brilliance Automotive**
  - Contributed to the 6th update of the internal JOYCHAT application's bus route module (launched Aug 1st).

Project Experience

- **Extreme Sports Game Collaborative Development | UE5/Houdini | 2025**
  - Responsible for level design and generation, as well as core gameplay implementation.
- **2D Pixel Mecha Dual Joystick Shooter Game | C++ | Warwick University Game Jam October 2024**
  - Fully implemented a 2D dual joystick shooter game in C++.
  - Developed custom NPC data, data-driven map, collision detect and animations.
  - Self-learned Blender for character animation and map creation.
- **PCG City Generator Based on Houdini | UE5/Houdini | Graduation Project 2024 - 2025**
  - Developed a PCG city generator based on Houdini.
  - Supports custom city zoning, customized roads
  - visualized city zoning parameter panel, and external asset import.
- **Basic Ray Tracing Renderer | C++/DirectX 11 | 2024**
  - Implemented core rendering functions, including Physically-Based Rendering (PBR) and path tracing for global illumination.
  - Implemented GGX microfacet model, importance sampling, and adaptive sampling.
  - GitHub: https://github.com/Davecodingking/RTBase.git
- **Basic 3D Game Rasterization Engine | C++/DirectX 11 | 2024**
  - Developed a basic 3D engine using C++/DirectX 11, implementing key rendering features such as deferred shading.
  - Built fundamental game systems, including skeletal animation and collision detection.
- **Unity3D Survival Game "Seed of Eden" | Unity3D | 2022**
  - Implemented core game systems for the survival game, including item management, combat, crafting, and building systems.

Interests

- Learning news and tech on Games and AI industries via Youtube
- Sports: Weight Lifting, Cycling