# Summary

Experienced graphics professional with in-depth knowledge of mobile game management and development. Graduate of the University of Leeds with advanced studies in computer graphics. Adept in using both OpenGL and Vulkan, complemented by the development of a mini game engine. Currently exploring new job opportunities in the graphics domain.

#### Education

University of Leeds, UK

Sept 2022 - Sept 2023

Master of Science (MSc) in High-Performance Computer Graphics and Game Engineering Coursework: Rendering, Geometry, Animation/Simulation, Vulkan, Game Engine

Zhejiang University of Technology, China

Sept 2018 - Sept 2022

Bachelor of Software Engineering

GPA: 3.9/5

 $Coursework: \ C++\ Programming,\ OOP\ Programming,\ Java\ Programming,\ Database\ and\ Front\ End$ 

Experience

Pandada Games Sept 2021 – Aug 2022

Intern Unity Client Programmer for "Ninja Must Die", a team with approximately 120 members

Hangzhou, China

- Took part in the company's internship training and mini-game competition during the first month, earning the Most Creative Prize
- Joined the combat team of "Ninja Must Die" and significantly improved the existing node editor, achieving a 70% enhancement compared to its previous state
- Implemented essential features for designers in combat team and provided training on how to use the editor. Left comprehensive documentation upon departure

 ${\rm Bian feng. com} \hspace{3cm} {\rm Jun} \ 2021 - {\rm Sept} \ 2021$ 

Intern Mobile Client Developer for a Go Game

Hangzhou, China

- Developed client-side gameplay, UI, and server interaction for a Go game using Cocos2dx-lua
- Conducted game testing across approximately 20 distinct Android phone models
- Maintained supporting tools and addressed daily business needs

### Ningbo Green Grass Biotechnology Co.

Jun 2018 - Sept 2018

Back-end System Development Intern

Ningbo, China

- Maintained back-end systems used by the operations department, covering device and user management across roughly 50 neighborhoods
- Introduced management features for the back-end website and facilitated visualization for CRUD operations within the database

### **Technical Skills**

Programming Languages: C++, GLSL, HLSL, Java, C#, Python, Javascript, Lua

Graphics API: OpenGL, Vulkan Engines: Unity 3D, Unreal, cocos-2dx

Frameworks: Qt (C++ & Python), MAUI & Blazor, React, Pytorch

Software & Tools: Git, SQL, Office, RenderDoc & Nsight, CMake, Kinect SDK, Motionbuilder, Blender

MISC: Design Patterns, Concurrency

**Projects** 

VR-based Dancing Training System | VR, Mocap, Body-tracking, Motion Compare Github

Jun. 2023 - Aug. 2023

- Processed dance data captured with Optical Mocap Devices in Motionbuilder
- Achieved 80% accuracy in real-time body-tracking and motion comparison using Kinect, enhanced by a Kalman filter
- Integrated and displayed within a VR environment using the HTC-ViVE headset and Unity 3D

Sparrow-Engine | OpenGL, Editor, Resources, Tools Github

Apr. 2023 – Jun. 2023

- $\bullet \ \ {\rm Designed} \ \ {\rm a} \ \ {\rm comprehensive} \ \ {\rm asset} \ \ {\rm and} \ \ {\rm resource} \ \ {\rm workflow}, \ {\rm encompassing} \ \ {\rm serialization}, \ {\rm prefab}, \ {\rm scene} \ \ {\rm graph}...$
- Created robust tool chains and utility modules, such as math operations, file systems, configurations, launch processes, and lua-bindings
- Created a user-friendly editor for the engine, featuring a menu bar, scene item selection, file explorer, and other essential tools

Sparrow-Renderer | OpenGL, Rendering, Simulation Github

Apr. 2023 – Present

- Implemented over 10 rendering features in the forward pipeline using C++ and OpenGL
- $\bullet$  Developed cloth simulation using the Mass-Spring System and Verlet Interpolation, achieving stable FPS above 60 with 40,000 mass nodes
- Designed modular code structure for scalability and future engine development

## Language Proficiency

Mandarin:native English: fluent