

Glenn Kirk

1 Linen Lodge, Donaghcloney, Craigavon, BT66 7XG, United Kingdom
+44(0)7702574447 • terids@gmail.com • Portfolio: <http://terids.rf.gd>
Available from May 1st 2022

Background

An experienced developer that has worked successfully, both as an individual and as part of large teams, in the Games Development and Virtual Production industries.

I have AAA exposure with Unreal Engine 4 and Unity 3D, including deep knowledge of the Unreal Engine DirectX 11 and 12 rendering pipeline.

Patents

2021 - Inventor (Part 1) [Efficient graphical processing in 360-degree spherical space](#)

2021 - Inventor (Part 2) [Efficient graphical processing in 360-degree spherical space](#)

Employment History

Full employment history available upon request

Graphics Engineer (Remote), [OffWorldLive Ltd.](#)

(April 2020 – May 2022)

- ❖ Co-Inventor of 2 patents for advanced 360 degree rendering and bloom techniques
- ❖ Researched, designed, and implemented an Unreal Engine livestreaming plugin which has since attained 30,000+ active users, with cinematic camera and 360 degree rendering functionality
 - Worked with DirectX 11 and 12 to implement shared GPU textures between Unreal Engine and other local software
 - Designed and implemented an authentication system within Unreal Engine to solve complex licencing requirements
 - Integrated libav (FFmpeg) C libraries to add real-time audio/video encoding and RTMP streaming from within Unreal engine
 - Implemented a telemetry system to gather information on how users interact with the plugin
- ❖ Designed and implemented a WPF automation tool which receives commands over websockets to remotely control Unreal Engine and OBS Studio streaming
- ❖ Carried out profiling and optimisation of code, graphics, and networking per project as required
- ❖ Worked closely with external Virtual Production clients to implement custom level and gameplay features in C++ and Blueprints

Freelance VR Programmer (Remote)

(May 2018 – April 2020)

- ❖ Genres worked on included a 2D platformer, VR astronaut first-person puzzle, and multiplayer match 3 game
- ❖ Working with Unreal Engine 4, Unity3D, and Godot game engines
- ❖ Gameplay and graphics programming for a number of clients

Project Lead / VR Programmer / Designer (Remote, Contract), Holonautic

(November 2018 – February 2019)

- ❖ Planned and executed the development of a new VR project while leading a small team to meet target deadlines and goals
- ❖ Designed the gameplay, levels, and features
- ❖ Gameplay and graphics programming in VR for Unity 3D

Placement Programmer, [Sumo Digital Ltd.](#)

(May 2016 – August 2017)

- ❖ Developed a AAA console title from prototype to green-light using Unity3D and Unreal Engine 4.
- ❖ Implemented a volume-based water physics system, compatible with any physics object in the game
- ❖ Worked with the art team to implement various particle effects and animations, such as firing turrets, water ripples and spray, and collectable items
- ❖ Worked with the audio team to implement different gameplay and menu audio effects using the WWISE platform
- ❖ Implemented camera positioning, movement, and FOV adjustments for player custom-made vehicles
- ❖ Implemented a pause menu system for game options and debug settings for development
- ❖ Designed and implemented a dialogue system using Excel and imported to the game using VB.Net and JSON, allowing designers to dynamically edit dialogue outside of the game engine

Awards

2017 Part 1 winner; Part 2 winner (And previous years 2016, 2015)

IBM Master the Mainframe

2015 School Prize for Best Overall Performance in the First Year in Computing

University of Central Lancashire

Key Skills

Languages	C++, C#, HLSL, GLSL, Cg, Lua, Java, C, Zig, VB.Net, HTML, JavaScript
Software	Unreal Engine, Unity 3D, Vulkan, DirectX 11/12, OpenGL, Perforce, Plastic SCM, Git