# **Glenn Kirk**

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An experienced developer that has worked successfully in the Games Development and Virtual Production industries. An avid learner with a strong attention to detail and a drive to deliver. Most recently I have been leading teams to create AAA games across Steam, XBox, and Playstation 5, and completed a postgraduate course in Agile Leadership and Management.

## Patents

2021	Inventor	Efficient graphical processing in 360-degree spherical space, Part 1
2021	Inventor	Efficient graphical processing in 360-degree spherical space, Part 2

## **Employment History**

Full employment history available upon request

## Lead Software Engineer (Remote), Nequinox Studios Ltd.

#### (August 2023 – Present)

Undisputed - Discover an authentic boxing experience. (playundisputed.com)

- Leading a co-development team of 5 engineers on Undisputed from pre content-complete through to submission
- Porting the game from PC to XBox Series S/X, Playstation 5, and Steam
- Planning and implementing the DLC and Entitlements logic across all platforms
- Planning and implementing controller and user management across all platforms
- Planning the migration of Cloudscript to Azure Functions
- Assessing and optimising the gameplay networking code
- Working with the team to produce high level technical designs and task break-downs
- Working with production to produce high level task estimates and assess bug priorities
- Mentoring and supporting the team through regular weekly 1 on 1 sessions
- Communicating with the client to make sure goals were met on time

## Senior Software Engineer (Remote), Nequinox Studios Ltd.

#### (June 2022 – August 2023)

Unannounced AAA title

- Working within a multi-threaded proprietary game engine
- General bug fixing and polish during alpha through to the end of submission
- DirectX 12 graphics debugging
- Debugging LUA game scripts

Propriatary Engine Project

- Initial implementation of the DirectX 12 and Vulkan graphics API's
- Adding general engine functions and unit tests
- Modifying Perforce settings and ignore files to prepare for team growth
- Writing Perforce tools to automate the linking of code check-ins with Reviewboard reviews

## 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
- Worked closely with external Virtual Production clients to implement custom level and gameplay features in C++ and Blueprints

## **Freelance 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)

Sackboy A Big Adventure - PS5 and PS4 Games | PlayStation (UK)

- Developed the title from prototype to green-light using the Unity3D and Unreal Engine 4 game engines.
- 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 various audio effects using the WWISE platform
- Implemented camera positioning, movement, and FOV adjustments for player vehicles
- Implemented a pause menu system for game options and debug settings for development
- Designed and implemented a dialogue system using Excel, VB.Net, and JSON