

Rory Clark

XR Technical Designer

Unity/C# Developer

EngD

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me@rory.games

XR Technical Designer and seasoned Unity/C# Developer with over 6 years of building hands-first interactions, demos, and tools. I hold an Engineering Doctorate for my work into virtual reality, user interaction, and mid-air ultrasound haptics.

I have a strong passion for user experience design and development, alongside my drive to enable others to achieve their full potential, through my knowledge, tooling, algorithms, and insights. Throughout my career I have proactively built plugins and packages to help further my skillsets as well as improving the professional applications I develop.

Skills

Unity

9 years

C#, VR, AR, Mobile, Physics, Packages, Editor Tools

C#

9 years

Unity, Networking, PhysX, Plugins

UX

3 years

2D & 3D UI, User Research, UI Design

XR

8 years

Hand Tracking, Meta, HTC, Pico, Qualcomm, AR

Experience

Ultraleap Senior XR Engineer 2018 - Present

VR/AR hand tracking R&D, leading multiple interaction research projects and innovative tooling

Built numerous consumer and customer demos for both XR and ultrasound haptics, primarily in Unity

Extensive amounts of rapid prototyping, bringing interactions and ideas from design to XR

Designed and implemented multiple 2D and 3D UIs across several projects for VR, AR, desktop, and mobile

Deployed applications across numerous XR devices such as Meta Quest, Pico, HTC, and AR glasses

Researched and developed several industry leading interaction paradigms, features, and plugins

Architected and overhauled multiple varying developer tools

Filed and contributed to multiple patents for both interactions and haptic principles

Authored and presented several pieces of work at conferences such as WorldHaptics and MIT

Worked extensively within both agile and kanban development processes

Please visit my portfolio for a more extensive list of projects and work



Experience cont.

Bournemouth University EngD Researcher 2017 - 2021

Doctorate thesis focusing on user interaction with VR, hand tracking, and ultrasound haptics

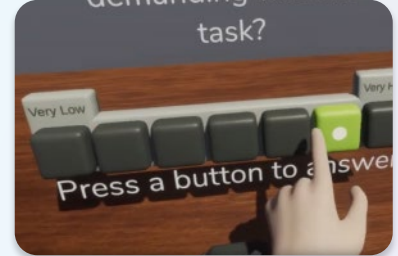
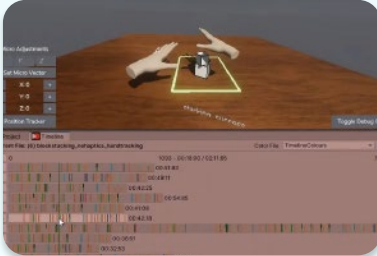
Two user studies comparing the differences between controllers and hand tracking, with ultrasound haptic feedback

Developed and patented a haptic rendering algorithm for 3D shapes

Built and developed the full study stacks across varying hardware and software, with in simulation questionnaires

Developed and open-sourced a user study recording and playback tool for greater analytics

Worked alongside Ultraleap in various other projects while studying



Qualifications

Engineering Doctorate Bournemouth University 2017 - 2021

Games Programming BSc Bournemouth University 2014 - 2017

Achieved First-Class Honours

Covered Unity, C#, C++, OpenGL, OpenCL, Virtual Reality, AI Programming

Web & Games Dev Btec L3 Bournemouth & Poole College 2012 - 2014

Achieved Triple Distinction Star

Interests

I have a strong interest for prototyping and development within Unity, be it interactions, designs, or game ideas. During my spare time I enjoy making plugins and tools that do unique things or solve challenging problems.

As a passionate problem solver, I absolutely love applying my skills to day to day life. I've spent many an hour using and building my own Home Assistant hub to automate and improve our daily routines.

Outside of programming I adore photography, spending over 5 years photographing wildlife, landscapes, travel, family and friends, and anything in-between.

References

Pip Turner

Manager and Colleague at Ultraleap

pipturner.work@gmail.com

Adam Harwood

Former Manager

adam.2kah@gmail.com

Questions?

Send me an email, I'll be sure to respond ASAP.

me@rory.games