**Name:** Alexander Stephen Allman

**Address:** 149 Heather Road, Newport, NP19 7QW

**Telephone:** 07544170061

**Email:** alexallmandev@gmail.com

**Key Skills:**

* Good communication skills
* Stakeholder management
* Problem solving, breakdown and organisation
* Continual professional development
* Engineering for real time and predictive solutions
* Khronos OpenXR contributions and participation.

**Technical Experience:**

|  |  |  |
| --- | --- | --- |
| * C++ | * Unity | * Agile |
| * C# | * Unreal | * Docker |
| * Python | * Git / Git Flow | * JIRA |
| * Rust | * Linux |  |
| * CMake | * Android |  |

**Experience and Education:**

*Oct 2022 – Present*

**Ultraleap – OpenXR Software Engineer**

At Ultraleap I worked on the OpenXR API Layer implementation that took hand data from the underlying LeapC library and reformed it to be served via the *XR\_EXT\_hand\_tracking* and *XR\_EXT\_hand\_interaction* extensions. This reforming of the data included extrapolation for reduced latency, filtering to help reduce noise and jitter and rebasing those positions in a relative OpenXR space.

Key developments include:

* Cross platform support for Windows, Linux and Android.
* Good communication between front end tooling and lower level data source due to being middle of the stack.
* CI development to help automate testing and artefact generation
* Implementation of multiple filtering algorithms in order to make noisy data more stable.
* Contributions and weekly meetup with the OpenXR Working Group to help represent the hand tracking and interaction side of the standard.
* Developing implementations that follow strict ruling imposed by the OpenXR Specification whilst working with the rest of the tech stack.

*Sept 2020 – Oct 2022*

**BT Security – Graduate Software Engineer**

Since graduating from university I have been working along the BT Security graduate training path. This has allowed me to develop further my skills significantly into a more software oriented domain.

Key developments include:

* Reverse engineering and Binary analysis.
* Server and Client communications via TLS.
* Test driven development and CICD for automated artefact creation and deployment.
* Chat client creation using C# and WPF.
* Unit testing and mocking.
* Setting up and using VMs for testing projects and learning how to leverage Ansible for an automated and consistent setup.
* Containerization through Docker.
* Soft skills through Insights training and group presentations.

*Sept 2018 – Sept 2019*

**Mobile Pie – Junior Game Developer / Designer**

As part of my Degree I worked an extended placement of 12 months as a Game developer and designer for Mobile Pie. I worked on various projects and worked as part of small teams in a highly iterative environment utilising an agile development methodology.

I worked on projects such as:

* + Worst Witch 2 – BBC
  + Journey to the World Cup 2022 – Edcoms
  + Farming Technology Education Game – Syngenta
  + Ethan Gamer App – For the Youtuber Ethan Gamer TV

*Sept 2016 – June 2020*

**BSC (Hons) Games Technology**

Graduated with a First Class Honours.

Key Modules:

* Advanced Technology – A module focused on newer and emerging technologies. This included developing a C++ Ray tracer from scratch, using Keras and TensorFlow to create an image classifier and procedural plant generation using DirectX.
* Creative Technology Project – A module which contained my dissertation. My dissertation leveraged a custom memory allocator and job system in order to gain Data Oriented Design performance benefits in an Object Oriented Workflow.
* Mobile Applications – A module which focused on the development process of mobile apps. In this I created an app which uses the Twitter API in order to fetch tweets from a set of specified handles, allowing the user to make custom groupings of related handles. This project leveraged the MVC design pattern.
* Commercial Games Development – A module focused on teamwork and communication. In this module the entire cohort worked on a single project broken down into seven scrums. I acted as a scrum leader for my specific system but also more of a producer role for the entire project with another colleague.

This Degree is an accredited course by TIGA.

**Additional Information:**

* Full UK driver’s license and car for travel.
* Able to work remotely full time.

**References:**

Available upon request.