

# Vacancy: Software Engineer - Senior Tools Programmer

## Role Description

### Date

15<sup>th</sup> September 2017

### Job Description

Virtual Arts Ltd is a virtual reality and augmented reality studio focused on games and experiences for mobile. We are developing our technology from scratch and we are hiring experienced programmers that can cover different areas of software development.

This role is for a Senior Tools Programmer who wishes to help build and manage a dynamic team of Senior and Junior Programmers. You will drive the team to achieve quality, performance and reliability.

### What you will be doing:

- Build and run a team of internal tools programmers
- Work within the Tools team on areas such as asset pipeline, automated systems and/or standalone user-interfaces
- Analyzing and fixing common problems in a graphics engine such as load times, memory usage, and performance problems
- Write debugging tools for programmers, level designers and artists
- Maintaining and fixing bugs in the toolchain
- Implement practical and timely solutions that meet the technical requirements
- Implement code that is modular, self-contained, and defensive and observes the technical constraints of the system
- Coach less experienced programmers
- Ensure coding standards are followed, and help to enforce good programming practices within the engineering team
- Developing new technologies for virtual reality and augmented reality (engine, tools, libraries).
- Learn about techniques and technologies and implement them in an efficient way.
- Performance analysis and optimizations (both on PC and mobile).
- Contribute to our regular planning and roadmap.
- Work closely with a team of professional artists that produce content for our games, experiences and demos.
- Test internal code and products and optimize for memory usage and performance as required
- Maintain technical documentation related to the Tools team's work
- Support marketing efforts (e.g. social media and blogs)
- Write and deliver internal and external presentations
- More.

We have also open positions for 3D and VR graphics experts as well as a Junior Tools Programmer.

### Skills & Requirements

- Tools development experience, ideally from scratch
- Experience with at least one scripting language (e.g. Python, Ruby)
- Professional experience with C/C++ and other languages like C# or Java
- Knowledge about high performance software
- Team oriented with a hands-on approach
- Code optimization/runtime analysis (on mobile devices is a plus)

We promote learning and expansion, depending on desire and ability you might be asked to contribute in the following areas:

- Experience designing and implementing features for an engine editor
- Experience with memory and performance profilers
- Familiarity with an existing graphics engine with an understanding of game engine and editor concepts
- .Net, ASP.Net and WCF skills
- User Interfaces developed with WPF
- QT, WinForms and/or Slate
- Implementing and maintaining an asset pipeline
- 3dsmax SDK and MaxScript
- Maya
- Test driven development, Unit Testing, Agile etc.
- Rendering APIs like OpenGL, DirectX, Vulkan, Metal
- Multithreading and parallelism
- High performance networking
- SIMD
- Android native development
- Game development

### Location

We are headquartered in Cambridge (UK) but will consider remote working for the right candidate.

If working remotely, candidates must be prepared to travel to Cambridge approximately twice per month for the first 6 months.

Overseas candidates will also be considered.

### Remuneration

Competitive salary, benefits package and equity.