**Purpose of the job:**

Digital Domain is one of the largest and most influential visual effects studios in the world. We produce top tier visual effects for movies, television, commercials, along with virtual production, augmented reality (AR), and virtual reality (VR) development services for clients and internally created content. The virtual production team is leading the industry with an advanced real-time visualization pipeline tightly integrated with motion capture, game engine, and interactive VR/AR technologies. We are looking to expand this team for work on key feature film and immersive storytelling experiences.

We are seeking experienced game developers to help develop and maintain thin and lightweight clients using C#/C++ within Unreal and/or Unity. Interfacing with hardware and streaming data servers directly into engine for virtual production along with custom game development for virtual reality should keep this role varied and busy.

**Essential Functions/Responsibilities**:

* To work closely within the virtual production and VR teams to develop and maintain lightweight clients and optimized modules covering AI, custom shader support, customs effects, hardware device input, network server/clients and game play mechanics to support feature film production pipelines (using game engine for visualization) and virtual reality experiences.
* Application of experience and knowledge to optimize game engine deployment for virtual reality in terms of memory, frame rate and performance.
* Help develop new and exciting game play and experience mechanics for new virtual reality projects.
* Develop and maintain optimized modules for tools surrounding virtual production that utilize game engines along with UI and I/O modules.
* Design and develop core tools into the pipeline.
* Work with virtual production and virtual reality team to understand technical requirements.
* Active participation in technical and artistic discussions and problem solving.
* Work closely with TD’s and other development team members to further develop pipeline and workflows.

**Education and/or Experience Required:**

* 2+ years of 3D engine development experience within the games industry and with at least one AAA game shipped on PC or console.
* 2 + years of experience developing optimized modules in C#/C++ within Unity and/or Unreal.
* VR development experience advantageous.

**Skills, Abilities, Special Licenses or Certificate:**

* Strong knowledge of object oriented design, design patterns, 3D Math, linear algebra vector math and associated data structures.
* Expert knowledge of Unity3D and/or Unreal including GUI, asset bundles and materials/shaders.
* Strong knowledge in 3D graphics development (Particle Systems, Shaders) and performance optimization within game development.
* Strong knowledge of matrix algebra, trigonometry and computational geometry essential.
* Detailed knowledge of C#/C++ essential.
* Ability to implement existing script and/or visual scripting modules into optimized and economic code within Unity and/or Unreal.
* A good sense of creating and maintaining code bases that are accessible and modular.
* Willing to help lead the development path for creative development solutions for overall development pipeline and for individual projects.
* Strong knowledge of version control system such as perforce.
* Understanding of Maya and Python tool development advantageous.
* Experience with shader development in Unity and/or Unreal advantageous
* Fast, organized, take direction well, and can deal with high profile directors, vfx supervisors and production designers.
* Strong organizational and communications skills along with understanding production values, deadlines and priorities
* Willing to take direction and be a team player.