Technical Artist / FX Sim

Department: XR

Job Type: Freelance

Application Deadline: 9 September 2025 at 12:00:00

Date Posted: 12/08/25

Payment: Competitive

WHAT WE'RE LOOKING FOR

Key Info

Period	6 weeks
Remote Option	Fully Remote, with the option to work from Belfast city centre based office.
Hours	Variable between 20-40 hours per week.

Ideal Candidate

The ideal candidate we would be looking for would have more than 4 years of experience in Unity technical art, mastering visual effects optimisation for mobile XR devices, with expertise in shader development and rendering pipeline optimisation. Experience in Mixed Reality and Virtual Reality development is preferred, with particular focus on performance-critical applications and cross-platform deployment.

Skills

Core Technical Art Competencies:

- 4+ years experience in Unity technical art and visual effects development.
- Advanced shader development using Unity's Shader Graph and HLSL.
- Expertise in Unity's Universal Render Pipeline (URP) optimisation.
- Advanced understanding of rendering pipelines and graphics programming.

Mixed Reality & Virtual Reality Specialisation:

- Mixed Reality environment blending and occlusion techniques.
- Cross-platform XR rendering optimisation and compatibility.

Visual Effects & Environment Systems:

- Real-time particle systems optimisation.
- Environmental storytelling through visual effects (weather, destruction, emergency scenarios).

Performance & Optimisation:

- Mobile GPU performance analysis and bottleneck identification.
- Level-of-detail (LOD) systems implementation for complex environments.
- Texture streaming and memory management for XR applications.
- Frame rate optimisation techniques for maintaining presence in VR.

Asset Pipeline & Workflow:

- Technical art asset pipeline development and maintenance.
- Collaboration with 3D artists on performance-optimised asset creation.
- Github/Version control systems for technical art assets and shaders.
- Documentation and knowledge sharing for technical art standards.

Output

Visual Effects & Rendering Systems:

- Camera passthrough integration with environmental blending for Pico devices.
- Smooth scene and stage transitions that maintain immersion and presence.
- Real-time lighting solutions that enhance learning objectives and emotional engagement.

Performance Optimisation Deliverables:

- Custom shader library.
- Technical documentation for rendering pipeline best practices.
- Performance benchmarking across target XR platforms.

Technical Art Pipeline:

- Standardised technical art workflow documentation.
- Asset optimisation guidelines for 3D artists and environment designers.
- Quality assurance protocols for visual effects and rendering performance.
- Cross-platform compatibility testing and validation procedures.

Collaboration & Integration:

- Technical art integration with Unity's MRTK for spatial interactions.
- Visual feedback systems for learning analytics and performance measurement.
- Collaborative workflows with UX designers for immersive interface elements.
- Integration support for biophysiological monitoring visual indicators.