

Unity Develop (Senior)

Department: XR

Job Type: Freelance

Application Deadline: 26 August 2025 at 12:00:00

Date Posted: 12/08/25

Payment: Competitive

WHAT WE'RE LOOKING FOR

Key Info

Period	18 Weeks
Remote Option	Fully Remote, with option to work from Belfast city centre based office.
Hours	40 hours per week

Ideal Candidate

The Ideal candidate we would be looking for would ideally have 8 years of experience in Unity development, mastering cloud-connected infrastructure (PostgreSQL & MongoDB) as well as remote application compilation infrastructure. Experience in Mixed Reality and Virtual Reality development is essential.

Skills

Advanced Unity Development & Architecture:

- Ideally 8+ years experience in Unity development with expert-level C# programming.
- Advanced understanding of Unity's architecture patterns and design principles.
- Expertise in Unity features and cross-platform deployment strategies.
- Advanced knowledge of Unity's Universal Render Pipeline (URP) and graphics programming.
- Proficiency in Unity's advanced systems including Timeline, Cinemachine, and Addressables.

Cloud Infrastructure & System Architecture:

- Advanced integration with PostgreSQL for execution data and analytics management.
- MongoDB expertise for configuration data and real-time collaboration systems.
- API gateway integration and RESTful service architecture design.
- WebSocket and WebRTC implementation for real-time communication and collaboration.

Mixed Reality & Virtual Reality Expertise:

- Hands-on VR and MR development experience on Oculus Quest and Pico Enterprise.
- Advanced spatial interaction design and implementation using MRTK.
- Hand tracking and eye tracking integration and monitoring.
- Dynamic Lighting Probing, Baking and automations.

DevSecOps & Deployment Infrastructure:

- CI/CD pipeline development and DevSecOps implementation for Unity projects.
- Version control systems and collaborative development workflow optimisation.

Desktop & Enterprise Application Development:

- Advanced desktop application development with Unity for enterprise environments.
- Unity wrapper interface design and development for complex business applications.
- Integration with enterprise systems including SSO, LDAP, and organisational databases.
- Cross-platform compatibility and deployment for Windows.
- Enterprise-grade logging, monitoring, and debugging system implementation.

Output

CI/CD & DevSecOps Infrastructure:

- Comprehensive CI/CD pipeline implementation for automated Unity project deployment.

- DevSecOps framework with integrated security scanning and compliance monitoring.
- Deployment orchestration systems for multi-platform and multi-environment releases.

Cloud Compilation & Architecture Systems:

- Microservices integration framework connecting Unity applications with backend systems.
- Real-time data synchronisation systems between Unity clients and cloud infrastructure.

Advanced Architecture Design & Implementation:

- Technical architecture documentation and design specifications for the platform.
- Modular system design enabling scalable development and maintenance workflows.
- Integration architecture connecting Unity applications with all platform microservices.
- Cross-platform compatibility framework ensuring consistent functionality across devices.
- Enterprise-grade logging and debugging systems for comprehensive quality assurance.

Serialisation & Data Management Systems:

- Advanced serialisation systems for complex simulation data and user progress tracking.
- Asset bundle management and dynamic content loading systems.
- Database integration layers for PostgreSQL and MongoDB connectivity.

Automated Optimisation & Performance Systems:

- Performance optimisation frameworks for mobile XR devices and desktop applications.
- Memory management and resource allocation systems for long-running applications.
- Automated quality assurance and performance validation systems.

- Cross-platform optimisation tools ensuring consistent performance across target devices.

Learning Analytics & Assessment Frameworks:

- Biophysiological integration.
- Gamification mechanics that enhance engagement whilst maintaining educational integrity.
- Progress tracking and reporting systems for educators and training coordinators.