SEONJEONG PARK

XR Developer

🌐 portfolio website

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SUMMARY

XR Developer with 2+ years of experience specialising in intuitive and creative spatial interaction design and development. Passionate about combining storytelling with cutting-edge XR technology to create immersive and engaging user experiences. Skilled in Unreal, Unity Engine and AI integration, with a proven track record of leading projects from ideation to launch, achieving multiple awards and recognitions.

SKILLS

Program Languages:	C#, C++, Python, Javascript, HTML, CSS
Game Engines:	Unity, Unreal Engine
XR Technologies:	Meta Quest2/3/Pro, AR Core/Foundation, Spark AR, Motion Capture
Frameworks:	Openframeworks, Processing
AI Tools:	Comfy UI, Midjourney, Runway, Stable Diffusion
Software/Tools:	Blender, Maya, Figma, Adobe Photoshop, Illustrator, Premier Pro
Version Control:	Perforce, Git, Github, Plastic SCM

EXPERIENCE

10/2022 – present
(2 years 6 months)

XR Developer — No Ghost (London, United Kingdom)

- Developed **R&D prototypes** for AI-driven XR workflows, leveraging state-of-the-art open-source models (SAM, Stable Diffusion, NeRF, 3DGS) to create XR-specific solutions for creative applications. Designed a scene reconstruction pipeline, transforming images and videos into MR-compatible 3D environments. Optimized ML pipelines with Python, improving data processing and model efficiency. Led technical documentation and R&D reporting, refining methodologies and development strategies.
- Developed the prototype for the **"Garden Meditation Mixed Reality"** app using Unreal Engine for Meta Quest devices. Designed and developed unique mixed reality interactions and stereo layers, using the Meta MR SDK to elevate the meditation experience. Assisted in implementing a robust save system and state tree to ensure seamless user interaction and progress continuity. Designed and integrated user-friendly UI and comprehensive application features, enhancing overall user engagement and usability.
- Contributed to **"Wallace & Gromit in The Grand Getaway"** for Meta Quest devices, utilising Unreal Engine and focusing on gameplay design and player interactions. Engaged in core gameplay feature integration. Collaborated with a cross-functional team, including senior developers, designers, and technical artists, contributing to animation montages, sound design, and shader development. Involved in the full software development life cycle, from initial design and planning to development, QA, and launch. Participated in rigorous testing and bug-fixing processes, and used Perforce for source control.
- Engaged in the **"Messi Football Game"** development using Unity Engine and C#, focusing on engaging gameplay design and intuitive UI integration. Spearheaded virtual cinematic experiences, and implemented a robust localization system. Collaborated with multidisciplinary teams to integrate animations, 3D models, and sound effects, enhancing mobile compatibility for Android and iOS. Utilised Git for source control.

Unity Engine (C#) | Unreal Engine (C++, Blueprints) | Meta Quest | Android

10/2024 – present

VR Developer, Prototyper — KArts ATLab (Seoul, South Korea)

- Led R&D prototype phases to explore AI integration in XR storytelling, iterating on AI-driven interactions using Stable Diffusion for real-time texture generation and GPT, ElevenLabs API, and gaze tracking for adaptive, object-based narration. Refined AI-enhanced storytelling techniques before transitioning to full VR production.
- Developed a VR film in Unity, collaborating with artists and directors to transform R&D findings into an immersive cinematic experience.

Unity Engine (C#) | OpenAI | Stable Diffusion | ElevenLabs | Meta Quest

4/2022 – 1/2025

VR Developer, Researcher — Goldsmiths University of London | LASALLE College of Arts(Singapore)

⭷ IEEE VR 2023 poster link ⭷ IEEE VR 2023 poster presentation video

- Designed and developed an English presentation training VR app using Unity Engine (C#) for Meta Quest, aimed at enhancing English speaking skills for students
- Integrated AI-driven avatars, avatar rigging, avatar customization, hand tracking, and gaze tracking technologies
- Conducted in-depth research and analysis using SPSS and Python, resulting in the creation of a poster that was accepted at the IEEE VR 2023 conference
- Received a total of £10,000 grant from the PIF funding (Goldsmiths - LASALLE collaboration), validating the project's impact and potential

Unity Engine (C#) | Meta Quest | Python | SPSS

| 4/2023 – 9/2023 | **Creative Technologist** | **Noonssup (London, United Kingdom)** |

⤓ Memory Journey Project Video ⤓ Memory Journey Project Website
- Executed the "Dream Archive Project," an immersive art installation developed through the Korean government's Art and Technology Convergence Idea Planning and Implementation Project in 2023
- Utilised Processing to create a multi-sensory experience, integrating AI and data algorithms to vividly portray participants' experiences and inner stories
- Collaborated with artists and developers to achieve achieve real-time user and data-interactive generative projection mapping
- Presented the project at Musinsa Studio Hannam 1st Branch during a video screening event (Dec 1 - Dec 2, 2023)

[Processing] [Open AI]

| 2/2020 – 4/2021 | **Contents Marketer** | **Tripbtoz (Seoul, South Korea)** |

- Created and managed social media presence on Instagram, Facebook, Blog, and YouTube and Initalised and analysed IG brand contents, implementing AR marketing strategies and increased 8,000+ followers

| 1/2020 – 8/2021 | **Freelance Illustrator & Cartoonist** | **Self-Employed** |

⤓ Travel Cartoon Instagram Link ⤓ Travel Illustration Instagram Link
- Collaborated with Marketing departments to create high-quality illustrations to enhance products and effectively communicated with clients to translate their visions into solutions

PROJECTS

| 9/2024 | **Baobab Diary - MR Mindfulness App for Meta Quest** | **Metaverse Developer Contest (Seoul, South Korea)** |

⤓ Project Walkthrough Video
- Led the project ideation, development, and Git pipeline implementation using Unity and C#
- Developed an MR experience integrating real environments using Meta SDK, featuring emotion-adaptive backgrounds and implemented creative and intuitive interactions using hand-tracking
- Integrated speech recognition with OpenAI's Whisper API, real-time heart rate data with HypeRate API, and implemented emotion data storage for user self-reflection

[Unity Engine (C#)] [Meta Quest)] [Open AI] [HypeRate Plugin]

| 2/2023 | **The Last Mycophile - VR Game** | **London, United Kingdom** |

⤓ The Last Mycophile Project Page
Successfully developed a VR demo for 2023 global game jam using Unity and Meta Quest 2 with hand tracking. Mainly responsible for game design, development and 2D illustrations
[Unity Engine (C#)] [Meta Quest]

| 9/2020 - 10/2020 | **Travel the World** | **Incheon, South Korea** |

⤓ Travel the World Exhibition Details
Solo exhibition in Incheon, South Korea, demonstrating digital travel illustrations

EDUCATION

| 9/2021 - 9/2022 | **Virtual & Augmented Reality (MSc)** | **Goldsmiths, University of London (London, United Kingdom)** |

- Graduated with Distinction, focusing on AR/VR project development and staying current with XR advancements
- Relevant Modules: Virtual Reality, Augmented and Mixed Realities, Advanced Topics in Virtual and Augmented Reality, Advanced Programming for Games, Programming for Game Engines, Mathematics and Graphics for Computer Games, Workshops in Creative Coding

[Unity Engine (C#)] [Unreal Engine(Blueprints)] [OpenFrameworks(C++)] [SparkAR] [Motion Capture]

| 3/2015 - 6/2021 | **Game & Interactive Media Convergence** | |
| | **Chinese Langauge and Literature (BA)** | **Chung-Ang University (Seoul, Korea)** |

[Unity Engine (C#)] [Unreal Engine(Blueprints)] [Processing] [3D Maya]

PUBLICATIONS & HONOURS

| 3/2025 | **Reducing Foreign Language Anxiety through Repeated Exposure to a Customizable VR Public Speaking Application (Frontiers in Virtual Reality)** |

⤓ Frontiers paper link
Park, Seonjeong, et al. "Reducing Foreign Language Anxiety through Repeated Exposure to a Customizable VR Public Speaking Application." Frontiers in Virtual Reality 6: 1519409.

| 10/2024 | **Guest Lecture on Game Design (Catholic University of Korea)** |
| | Delivered a lecture on game design for undergraduate students in the Department of Media Technology and Content at the Catholic University of Korea. Covered key topics such as game ideation, development processes, and project case studies. Additionally, shared industry insights with a focus on XR and spatial design. |

9/2024	**2024 Metaverse Developer Contest (Seoul, South Korea)**
	☐ Project Walkthrough Video
	Winner of the 2024 Metaverse Developer Contest, awarded by the Korea Metaverse Industry Association (submission out of 349 teams)

3/2024	**Presentation at The Asian Conference on Education & International Development (ACEID2024)**
	☐ ACEID 2024 Conference paper link
	Carlisle, Damaris; Park, Seonjeong; Gillies, Marco and Pan, Xueni. 2023. ' Harnessing Virtual Reality: Tackling Foreign Language Anxiety and Elevating Public Speaking Skills'. In: ACEID2024 presentation

| 1/2023 - 9/2024 | **Goldsmiths-LASALLE Partnership Innovation Fund** |
| | A total of £10,000 funding recipient continuation of research project collaboration between Goldsmiths, University of London, and LASALLE College of the Arts. This grant supports ongoing efforts to explore reducing foreign language in a virtual reality environment. |

3/2023	**2023 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW)**
	☐ IEEE VR 2023 poster link
	Park, Seonjeong; Carlisle, Damaris; Gillies, Marco and Pan, Xueni. 2023. 'Reducing Foreign Language Anxiety with Virtual Reality'. In: 2023 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW). Shanghai, China 25-29 March 2023. [Conference or Workshop Item]

LANGUAGES

English - fluent **Korean** - native **Chinese** - HSK5