Minyoung Joo

Los Angeles, CA | minyoungjoo.com | LinkedIn/minyoungxr | junaline4@gmail.com

Researcher interested in how perceptual and embodied experience shapes spatial representations, and how these representations compare across humans and artificial agents. Experienced in designing immersive experimental environments, conducting human-subject studies, and developing interactive systems for research in perception and spatial cognition.

RELEVANT RESEARCH EXPERIENCE

UCLA Zili Lab | Los Angeles, CA
2026–Present

Research Assistant

- Contribute to the design and development of a VR study investigating visual depth perception, identifying perceptual and methodological confounds and translating them into experimental controls and protocol refinements.
- Analyze hand-tracking data collected while participants trace stimuli to characterize systematic patterns and variability in spatial judgments across experimental conditions, while developing tools for quantitative analysis and visualization.

UCI Chrastil Lab | Irvine, CA
2026–Present

Research Assistant

- Assist with research on spatial navigation and cognition using immersive VR and fMRI, examining how active movement and experience contribute to spatial learning and representation.

Seekr | Los Angeles, CA
2026–Present

Design Researcher

- Design 3D environments and navigation tasks for evaluating how embodied AI agents acquire and use spatial knowledge, with the broader goal of comparing spatial behavior and representations across human and artificial agents.
- Co-authored an accepted paper on an embodied-AI spatial navigation platform for ACM SIGSPATIAL UMFM '26.

University of Notre Dame | Notre Dame, IN
2025

Extended Reality Intern

- Developed a Meta Quest 3 learning environment using Unity, C#, and the Meta SDK; implemented gesture recognition and AI-driven character interaction for Korean language and culture education.

ArtCenter College of Design | Pasadena, CA
2024

Immersion Lab Resident Researcher

- Designed and conducted a human-subject study of bodily responses during immersive learning; coordinated participant sessions and collected and analyzed hand-pressure sensor data.

Data to Discovery (Caltech, NASA JPL & ArtCenter) | Pasadena, CA
2024

External Research Collaborator

- Collaborated with scientists and designers on interactive visual analytics for carbon-cycle and climate-model data, contributing to research documentation and two IEEE VIS 2025 publications.

EDUCATION

ArtCenter College of Design | Pasadena, CA — 2025
MFA, Media Design Practice – Graduated with Distinction, GPA 4.0; Graduate Fellow

Hongik University | South Korea — 2023
BFA, Design Convergence – Industrial Design and UX Research

SELECTED PUBLICATIONS

Sparacino, **Joo**, Zheng (2026). Seekr: Configurable Cognitive Scaffolding for Vision-Language Foundation Models in Embodied Navigation. ACM SIGSPATIAL UMFM 26'

Pham, Hu, **Joo**, et al. (2025). Interactive Visual Analytics of Carbon Cycle Science. IEEE VIS 25'

Pham, Hu, **Joo**, et al. (2025). Visualizing Climate Model Outputs with CliMAScope. IEEE VIS 25'

Safioulline, **Joo**, Kim (2025). Emanation and Extinction. ACM IMX 25'

SKILLS

Research	Human-subject research, experimental design, behavioral data analysis, qualitative research, research synthesis
Technical	Unity, C#, JavaScript, VR/AR development, interactive prototyping, Arduino
Design & Visualization	Scientific data visualization, Figma, Adobe Creative Suite, Rhino