

Hyuckjin Jang

Graduate School of Culture Technology, KAIST

✉ : hyuckjin.jang@kaist.ac.kr  : <https://bit.ly/4ktJ2ah>

Area of Interest

Human-Computer Interaction / Extended Reality / Sensory Substitution / Assistive Technology / Media Psychology
/ Cognitive Neuroscience

Education

Ph.D. Candidate in Graduate School of Culture Technology, KAIST	Mar.2023 -
Interdisciplinary major in Graduate School of Metaverse, KAIST	Sep.2023 -
Visual Cognition Lab (Advisor: Jeongmi Lee)	Daejeon, Korea
M.S. in Graduate School of Culture Technology, KAIST	Mar.2021 - Feb.2023
Visual Cognition Lab (Advisor: Jeongmi Lee)	Daejeon, Korea
B.A. in Sogang University	Mar.2016 - Feb.2021
Communication	Seoul, Korea
Media Cognitive Science	Summa Cum Laude

Publications

Jang, H., Kim, B., Baek, K. D., Ahn, C., Lee, J. (2026). Feel the Sync: The Effects of Shared Haptic Feedback on Short-Cycle Repetitive Turn-Taking Collaboration of Remote Users in Virtual Reality. *In ACM CHI'26 (Conditionally Accepted)*.

Jang, H., & Lee, J. (2025). Birds of a Rhythm: The Effects of Haptic Pattern Similarity on People's Social Perceptions in Virtual Reality. *In Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems* (pp.1–18).

doi: <https://doi.org/10.1145/3706598.3714264>

Jang, H., & Lee, J. (2025). Effective VR Intervention to Reduce Implicit Bias towards People with Physical Disabilities: The Interplay between Experience Design and Individual Characteristics. *IEEE Transactions on Visualization and Computer Graphics*, vol. 31, no. 5 (pp. 2342-2352).

doi: <https://doi.org/10.1109/TVCG.2025.3549532>

Lee, J., **Jang, H.**, & Lee, J. (2025). How Do We Read Texts in VR?: The Effects of Text Segment Quantity and Social Distraction on Text Readability in Virtual Museum Contexts. *IEEE transactions on visualization and computer graphics*, vol. 31, no. 11 (pp. 9699-9708). (**Honorable Mention Award in ISMAR' 25**).

doi: <https://doi.org/10.1109/TVCG.2025.3616803>

Kim, T., Shin, J., Kim, H., **Jang, H.**, Kang, J., Lee, S. (2025). Voronoi Rooms: Dynamic Visibility Modulation of Overlapping Spaces for Telepresence. *ACM Transactions on Graphics*, vol. 45(2), no.17 (pp.1–15).

doi: <https://doi.org/10.1145/3777900>

Conference Presentations (* means co-first author)

Jang, H. & Lee, J. (2026, Jan). Exploring the Social Potential of Haptic Cues for Modulating Users' Group

Perception in Virtual Crowd Contexts. *Talk presented at the Korean Society for Cognitive & Biological Psychology (KCPB), Seoul, South Korea. (Outstanding Presentation Award).*

Jang, H., Kim, B., Baek, K., Ahn, C., & Lee, J. (2026, Jan). Modern Times: Shared Haptic Feedback for Enhancing Collaborative Experience and Inducing Interpersonal Synchrony in Short-Cycle Repetitive Remote Collaboration. *Talk presented at the Korean Society for Cognitive & Biological Psychology (KCPB), Seoul, South Korea.*

Jang, H., Kim, B., Baek, K. D., Ahn, C., Lee, J. (2025, Apr). The Preliminary Exploration of Sharing Haptic Feedback for Connecting Remote Users in XR. *Talk presented at Beyond Glasses: Future Directions for XR Interactions within the Physical World (XR-PHY) Workshop at CHI 2025, Yokohama, Japan.*
<https://sites.google.com/view/xr-phy-2025/accepted-papers?authuser=0>

Jang, H. & Lee, J. (2025, Feb). Haptic Pattern Similarity Modulates People's Social Perceptions and Interpersonal Distance in Virtual Reality. *Talk presented at the Korean Society for Cognitive & Biological Psychology (KCPB), Gwangju, South Korea.*

Jang, H. & Lee, J. (2023, Oct). Exploring Factors of VR-based Wheelchair Simulation for Reducing Implicit Bias. In *2023 IEEE International Symposium on Mixed and Augmented Reality Adjunct (ISMAR-Adjunct)* (pp. 673-674). IEEE.

doi: <https://doi.org/10.1109/ISMAR-Adjunct60411.2023.00144>

Jang, H. & Lee, J. (2023, Feb). Modulation of Implicit Bias toward People with Physical Disabilities by Wheelchair Experience in Virtual Reality. *Talk presented at the Korean Society for Cognitive & Biological Psychology (KCPB), Seoul, South Korea.*

Jang, H.*, Kim, T.*, Oh, S., Lee, J., Lee, S., & Yoon, S.H. (2022, Aug). Sense of Embodiment Inducement for People with Reduced Lower-body Mobility and Sensations with Partial-Visuomotor Stimulation. In *ACM SIGGRAPH 2022 Emerging Technologies* (pp. 1-2).

doi: <https://doi.org/10.1145/3532721.3535568>

Kim, S.*, **Jang, H.***, Oh, K.T.*, Oh, S., Kim, D., Woo, W., Lee, J., Ahn, J., Yoon, S.H. (2022, Oct). Bring Store in My Room: AR Store Authoring System for Spatial Experience in Mobile Shopping. In *2022 IEEE International Symposium on Mixed and Augmented Reality Adjunct (ISMAR-Adjunct)* (pp. 654-656). IEEE.

doi: <https://doi.org/10.1109/ISMAR-Adjunct57072.2022.00135>

Lee, G. B., **Jang, H.**, Jeong, H., & Woo, W. (2021, Oct). Designing a Multi-Modal Communication System for the Deaf and Hard-of-Hearing Users. In *2021 IEEE International Symposium on Mixed and Augmented Reality Adjunct (ISMAR-Adjunct)* (pp. 429-434). IEEE.

doi: <https://doi.org/10.1109/ISMAR-Adjunct54149.2021.00097>

Grants

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| 2025-2026 | Ph.D. student Research Encouragement Grant, NRF grant (RS-2025-25402731)
<i>"Validation of the Effectiveness of Haptic-Based Social Cues for Reducing Perceived Differences Between Polarized Groups in Extended Reality"</i> |
| 2023 | National R&D Real Challenge program, KIRD grant (N01230944)
<i>"Development of a Personalized XR Career Experience System Based on Physiological Data for Resolving Information Asymmetry and Facilitating Sustainable Career Aptitude Exploration among Information-vulnerable Youth"</i> |
| 2022 | High-Risk High-Return Project, KAIST grant (N11220132)
<i>"The Effect of the Avatar Embodiment and Experience Context in Virtual Reality on Implicit Physical-disability Bias"</i> |

Honors & Scholarships

2025	Graduate Student Outstanding Research Prize in College of Liberal Arts and Convergence Science, KAIST
2025	Best Research Award in KEA XR Professional Workforce Division Research Achievement Exchange Workshop
2023	Excellence Award in KIRD 2023 National R&D Real Challenge Program
2022	Edu 4.0Q TA Excellence Award , KAIST 2022 Spring Semester
2018-2020	The Next Century Humanities Scholarship , KOSAF
2019	Excellence Award in 60th Anniversary Slogan Contest, Sogang University
2017	Elective Course Proposal Award , Sogang University *Course Name: 'Introduction of Media Therapy'
2017	Semester High Honors , Sogang University
2016-2017	Academic Excellence Scholarship , Sogang University

Projects

2024-	STEAM R&D project , VCL, <i>Daejeon</i> Leading researcher in the Cognition part AR-AI-Cognition-Architectural Research for Transdimensional Interaction
2023-2025	Avatar Team , VCL, <i>Daejeon</i> Leading researcher TBD
2022-2024	SoA Team , VCL, <i>Daejeon</i> Co-researcher Evaluate and develop the eye-gaze-based joint attention cue in a collaborative VR task with ERP analysis
2023	DCT , <i>KIRD Real Challenge, Daejeon</i> Team Leader Build a research plan for developing a VR-based career exploration platform for information-vulnerable youth
2021	Project Mod <i>Nexon Creators Invitational 2021, Seoul</i> Creator Design a custom 2D game using the MOD engine
2021	GAZA Next Level 2021 Metaverse Developer Contest , <i>Seoul</i> Project leader, developer Plan and develop a mobile-based indoor AR shopping system
2019-2020	SION Healthcare Start-up , <i>Seoul</i> Project manager, co-founder Plan and organize the development of a play kit for facilitating children's ocular movement exercise

Experience

2025 Spring	TA in CTP311 Human Visual Cognition (KAIST)
2024 Fall	TA in HSS512 Experimental Methods for Humanities and Social Sciences (KAIST)
2024 10, 11	Instructor in XR and Cognition (Hanwha Galleria Dept. / Gyanggyo, Timeworld)
2024 Spring	TA in CTP445 Augmented Reality (KAIST)
2024 Spring	TA in HSS333 Introduction to Social Psychology (KAIST)
2023.11	Mentor in Dangjin Art&Science Academy (Dangjin Cultural Foundation / KAIST)
2023.04-23.07	Senior Mentor & Team Leader in Global Entrepreneur Summer School (KAIST)
2023 Spring	TA in GCT741 Topics in HCI: Interaction Sensing Principle & Application (KAIST)
2022.10	Mentor in Daejeon Artience Festival (Daejeon Cultural Foundation / KAIST)
2022 Spring	TA in HSS210 Language, Mind, Brain (KAIST)
2021 Fall	TA in HSS302(B) Language, Mind, Brain (KAIST)
2020.03-21.01	Administrative Assistant in Sogang Counseling and Psychological Service
2018, 2022	Mentor in Major Mentoring Program for International Students (Sogang)

Academic Service

Paper Review	CHI 2025 2026, IEEE VR 2025 2026, ISMAR 2025, KCC 2025, CSCW 2024
Poster Review	KCPB Poster Jury 2025 2026, CHI LBW 2022 2025, ISMAR Poster 2021 2022 2023
SV	ISMAR 2025

Mentoring

2023-2025	Jungmin Lee (MS)
2025 Winter	Hyowoo Shin (Undergraduate)
2024 Summer	Yoonho Noh (MS)

Technique & Skills

Programming	Python, C#, Unity, Matlab (ERP Core, EEGLab), R
Experiment	Cognitive and behavioral experiment design, Structured interview, Physiological measurement (EMG, ECG, EDA, EEG/ERP)
Media	Premiere Pro, Figma
Languages	Korean, English, Chinese