

Jaewan Park

Assistant Professor

Department of Convergence Design, Graduate School of Techno Design
Kookmin University, Seoul, South Korea

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RESEARCH INTERESTS

Design Science · UX/UI · Human–AI Interaction · Affective Design · Extended Reality (XR)

My research centers on **affective design** — how people emotionally perceive, evaluate, and bond with design artifacts and intelligent virtual agents, particularly in extended reality. I pair cross-cultural user studies with psychophysiological methods (EEG and bio-signals) to turn emotional and aesthetic response into evidence-based UX/UI frameworks for industry.

EDUCATION

- | | |
|---------|--|
| 02/2026 | Ph.D. in Design (Digital Design)
Yonsei University, Seoul, Korea
<i>Dissertation: A Multimodal Study of Narrative Structure: Linking Affective Ratings, EEG, and Post-Viewing Satisfaction</i>
<i>Advisor: Dr. Sangwon Lee</i> |
| 12/2012 | Master of Entertainment Technology (M.E.T.)
Carnegie Mellon University, Pittsburgh, PA, USA |
| 05/2010 | Bachelor of Fine Art (B.F.A.) in Film/Video
California Institute of the Arts, Valencia, CA, USA |

EMPLOYMENT

- | | |
|-------------------|--|
| 03/2021 – PRESENT | Assistant Professor
Department of Convergence Design, Graduate School of Techno Design, Kookmin University |
| 03/2017 – 02/2023 | Researcher / Senior Researcher
Symbiotic Lifetech Research Institute, Seoul, Korea |
| 03/2016 – 08/2018 | Visiting Professor
Sejong University, Seoul, Korea |
| 2014 – 2021 | Lecturer & Adjunct Professor
Kookmin, Yonsei, Sejong, Hanyang, and Konkuk Universities |
| 02/2014 – 02/2021 | Founder
PYPEP - Design Studio, Seoul, Korea |

PUBLICATIONS

MANUSCRIPTS IN PROGRESS

1. (SCIE) Narrow Face, Strong Conscience: Inferring Big Five from Virtual Agent Morphology. *Virtual Reality*. **MAJOR REVISION**

2. (SCIE) Paradiegetic User Interfaces: Balancing Immersion and Information Clarity in Virtual Reality. *Behaviour & Information Technology*. **MAJOR REVISION**
3. (SCIE) Generative AI Enhances Awe but Not Hedonic Pleasure in Virtual Museum Design. *International Journal of Human-Computer Interaction*. **MAJOR REVISION**
4. (SCIE) Behavioral Consensus but Neural Divergence: Event Segmentation and Satisfaction Prediction in Narrative Film Viewing. *Entertainment Computing*. **MANUSCRIPT READY**
5. (SCOPUS) Effects of Audiovisual Emotional Congruence and Arousal Level on K-pop Music Video Viewing Experience. *Music & Science*. **PREPARING FOR JOURNAL SUBMISSION**
6. (SCIE) Neural Correlates of Street Lighting Effects on Fear of Crime in Virtual Environments — An EEG Study. **IN PREPARATION**
7. (SCIE) Designing Guidance for Virtual Reality Chemical Safety Training: A Heuristic Framework and Controlled Evaluation. **IN PREPARATION**
8. (SCOPUS) Designing Data-Driven Focus Experiences through Metaphorical Feedback: A Comparative Evaluation of Focus Stella and Forest. **IN PREPARATION**
9. (SCOPUS) Effects of Information Presentation Formats in Emergency Alert Messages on User Perception and Behavioral Intention. **IN PREPARATION**
10. (International Conference) Orchestrated or Distributed: Comparing Centralized and Decentralized Multi-Agent Systems for Creative Support. **IN PREPARATION**
11. (SCOPUS) Generative Narrative Design Model for Short-Form Video: Facilitating Diverse Content Creation. **IN PREPARATION**
12. (SSCI) Affective Design of Blind Box Characters: Generation Z's Emotional Responses to Pop Mart IPs. **IN PREPARATION**

JOURNAL ARTICLES — SCIE/SSCI/SCOPUS

1. (SCIE Q1) Cui, M., **Park, J.**, Kim, J., Xu, L., & Lee, S. (2026). Beyond Post-WIMP: Rethinking the Desktop Metaphor for 3D Virtual Reality. *International Journal of Human-Computer Interaction*. Advance online publication. <https://doi.org/10.1080/10447318.2026.2669038>
2. (SCOPUS Q1) Ai, P., & **Park, J.** (2026). Music Visualization Using Dynamic Phyllotactic Patterns: A Generative Design Approach with Bézier Curve Mapping. *Archives of Design Research*, 39(1), 79–100.
3. (SCIE Q1) Kim, W., & **Park, J.** (2025). Illuminating Safety: The Impact of Street Lighting on Reducing Fear of Crime in a Virtual Environment. *International Journal of Human-Computer Interaction*, 41(19), 12464–12478.
4. (SCOPUS Q1) Choi, D., & **Park, J.** (2024). Flowing Line: A New Proposal of Visual Guidance Considering FoMO and Flow in Virtual Museums. *Archives of Design Research*, 37(1), 209–225.
5. (SCOPUS Q1) Shin, H., & **Park, J.** (2024). Evaluation of Interface Design for Video See-through Head-mounted Display: Focusing on Walking Users. *Archives of Design Research*, 37(1), 181–191.
6. (SCIE Q2) Choi, S., Kim, S., Kwak, M., **Park, J.**, Park, S., Kwak, D., Lee, H. W., & Lee, S. (2022). Would You Trust Driverless Service? Formation of Pedestrian's Trust and Attitude Using Non-Verbal Social Cues. *Sensors*, 22(7).
7. (SCIE Q1) Lee, S., Choi, B., Maia, C. C., **Park, J.**, Youm, S. H., & Lee, S. (2021). Integrating Simulation Into Design: An Experiment in Pedagogical Environments. *International Journal of Technology and Design Education*, 32(4), 2257–2277.
8. (SCIE Q2) Lee, S., Hwang, Y., Jin, Y., Ahn, S., & **Park, J.** (2019). Effects of Individuality, Education, and Image on Visual Attention: Analyzing Eye-Tracking Data Using Machine Learning. *Journal of Eye Movement Research*, 12(2), 4.
9. (SCOPUS Q1) **Park, J.**, Jin, Y., Ahn, S., & Lee, S. (2019). The Impact of Design Representation on Visual Perception: Comparing Eye-Tracking Data of Architectural Scenes Between Photography and Line Drawing. *Archives of Design Research*, 32(1), 5–28. (Best Paper Award)

JOURNAL ARTICLES — KCI

10. (KCI) Kim, W., & **Park, J.** (2023). Analysis of the Impact of Seoul's Safety Facilities on Women's Fear of Crime. *Journal of Korea Spatial Design*, 18(8), 113–120.
11. (KCI) Kim, S., **Park, J.**, & Cho, H. (2023). A Study on the Expression of Serial Comics in Children's Magazines. *Journal of Basic Design & Art*, 24(2), 61–74.
12. (KCI) **Park, J.**, Choi, B., Lee, S., & Lee, H. (2020). A Proposal of Emotion Recognition Mobile Application to Improve Depression in Young People. *Journal of the Korea Contents Association*, 20(2), 594–606.
13. (KCI) Xu, L., **Park, J.**, Ahn, S., & Lee, S. (2019). A Color Research Tool Based on Image Search Engines: Comparison with Kobayashi Color Image Scale. *Journal of Digital Contents Society*, 20(8), 1625–1634.
14. (KCI) **Park, J.**, Xu, L., & Lee, S. (2018). Virtual Reality Remote Pointing Experiment: Evaluation Using Fitts' Law. *Design Convergence Study*, 17(6), 167–177.

OTHER JOURNAL ARTICLES

15. (Other) Maia, C. C., Lee, S., **Park, J.**, & Lee, S. (2018). Enhance Simulation Software Accessibility through Remodeling User Interface Focusing on Higher Education Students. *International Journal of Asia Digital Art and Design*, 22(2), 47–55.

TOP-TIER INTERNATIONAL CONFERENCE PAPERS

1. (ACM CHI EA) Kang, S., & **Park, J.** (2026). PainGlyphs: Vocabulary-grounded 3D Glyphs for Everyday Pain Communication. In *Extended Abstracts of the 2026 CHI Conference on Human Factors in Computing Systems*. ACM.

CONFERENCE PAPERS

2. (HCI Korea) Kang, S., & **Park, J.** (2026). An Exploratory Study on the Cultural Transformation of Uncanny AI Short-Form Content: From Uncanniness to Humor Through Human Mimicry. In *Proceedings of HCI Korea 2026* (pp. 512–516).
3. (HCI Korea) Lee, C., & **Park, J.** (2026). From Tool to Subject: Analyzing the Narrative Function of AI Graphics in K-POP Music Videos. In *Proceedings of HCI Korea 2026* (pp. 630–635).
4. (HCI Korea) Kil, S., & **Park, J.** (2026). Analyzing the Spatial Structure of Outdoor Immersive Media Exhibitions Using Space Syntax. In *Proceedings of HCI Korea 2026* (pp. 704–709).
5. (HCI Korea) Kim, Y., & **Park, J.** (2026). A Strategy to Increase the Reliability of Beauty App Services Using AI Technology. In *Proceedings of HCI Korea 2026* (pp. 1332–1337).
6. (HCI Korea) Park, S., & **Park, J.** (2026). The Role and Potential Expansion of LLMs in the Ideation Process. In *Proceedings of HCI Korea 2026* (pp. 1453–1456).
7. (KSDS) Cho, S., Park, S., Kim, J., & **Park, J.** (2025). Exploring New Evaluation Metrics for Video Generative AI through Designer-Centered Experimental Assessment. In *Proceedings of the KSDS Spring International Conference* (pp. 28–33).
8. (HCI Korea) Lee, C., & **Park, J.** (2025). A Proposal for Expanding the K-POP Music Experience and Strengthening Digital Music Competitiveness through Video-Based Moving Album Art. In *Proceedings of HCI Korea 2025* (pp. 179–184).
9. (HCI Korea) Yoo, H., Kim, J., Lee, D., Lee, C., & **Park, J.** (2025). Proposal of Para-Diegetic UI in VR FPS Game. In *Proceedings of HCI Korea 2025* (pp. 576–582).
10. (HCI Korea) Lee, D., & **Park, J.** (2025). Exploring New Possibilities for Online Posthumous Exhibitions through the Integration of AI and VR Technologies. In *Proceedings of HCI Korea 2025* (pp. 1292–1297).

11. (HCI Korea) Yoo, H., & **Park, J.** (2025). SQUARE: A Study on Real-Time Music Sharing Services Using YouTube Music. In *Proceedings of HCI Korea 2025* (pp. 1369–1373).
12. (KSDS) Kang, J., Kang, S., & **Park, J.** (2024). A New UI Form for VR FPS Games: Proposing Semi-Diegetic from Pragmatic and Hedonic Perspectives. In *Proceedings of the KSDS Fall International Conference* (pp. 420–423).
13. (KSDS) Shin, H., Kim, W., Kang, S., Kang, J., & **Park, J.** (2024). Hedonic Motivation Experiment on Virtual Assistant Appearance: Sharing Online Survey Failure Cases. In *Proceedings of the KSDS Spring International Conference* (pp. 356–357).
14. (HCI Korea) Kim, H., & **Park, J.** (2024). Object Characteristics and Interaction Analysis in Media Art Exhibitions. In *Proceedings of HCI Korea* (pp. 363–367).
15. (HCI Korea) Shin, H., Kim, W., Kang, J., & **Park, J.** (2024). Trust and Preference Study on IVA Appearance: US and Korea. In *Proceedings of HCI Korea* (pp. 608–609).
16. (KSDS) Kang, S., Kang, J., & **Park, J.** (2023). Differences in Personality Perception Based on Intelligent Virtual Assistant Appearance. In *Proceedings of the KSDS Fall International Conference* (pp. 494–497). (Encouragement Award)
17. (KSDS) Shin, H., & **Park, J.** (2022). Readability Evaluation Experiment Proposal in HMD-based Pass-through Environment. In *Proceedings of the KSDS Spring International Conference* (pp. 188–189).
18. (KSDS) Choi, D., & **Park, J.** (2022). Visual Guidance in VR Virtual Exhibitions. In *Proceedings of the KSDS Spring International Conference* (pp. 254–255).
19. (KSDS) Kim, W., & **Park, J.** (2022). Expressing COVID-19 Severity Using Data Visualization: Comparing Seoul and New York. In *Proceedings of the KSDS Spring International Conference* (pp. 104–105).
20. (KSDS) Kim, S., & **Park, J.** (2021). LED Media Facade Evolution. In *Proceedings of the KSDS Fall Conference* (pp. 248–249).
21. (HCII) Maia, C., **Park, J.**, Lee, S., Choi, B., Choi, S., & Lee, S. (2020). The Influence of Simulation Tool Usage on Architecture Student Design: Shifting from a Technical Perspective to a Design-Focused Perspective. In *Proceedings of the International Conference on Human-Computer Interaction* (pp. 109–120). Springer.
22. (HCI Korea) **Park, J.**, Lee, S., Kang, D., Kim, S., & Lee, S. (2019). Emotion and Immersion Analysis of Short Film Viewers Using BCI and VR Devices. In *Proceedings of HCI Korea* (pp. 765–768).
23. (Other) **Park, J.**, Choi, B., Lee, S., Maia, C., Kang, D., Hong, S., Kim, S., & Lee, S. (2018). Development of VR/AR Content for Brain Science Exhibition for Value Diffusion. In *Proceedings of the 8th International Science Museum Symposium* (pp. 26–30).
24. (KSDS) **Park, J.**, & Lee, S. (2018). Remote Pointing Experiment in VR Using Fitts' Law. In *Proceedings of the KSDS Fall Conference* (pp. 106–107).
25. (KSDS) Ahn, S., Choi, B., **Park, J.**, & Lee, S. (2018). Effects of Daily Quest Types on Intrinsic Motivation in Mobile Arcade Games. In *Proceedings of the KSDS Spring Conference* (pp. 56–57).
26. (Other) **Park, J.**, Eo, H., Min, K., & Lee, S. (2018). Indoor Evacuation Simulation for Fire Situations: Focusing on the Jecheon Fire. In *Proceedings of the 7th EDISON SW Competition* (pp. 51–56). (Encouragement Award)

PATENTS

1. (2026). Method and system for providing emotion expression interface (Korean Patent No. 10-2914903). Kookmin University.
2. (2023). VR character control device and method using brainwave data (Korean Patent No. 10-2560271). Yonsei University.
3. (2021). GUI-based urban earthquake evacuation simulation method and device (Korean Patent No. 10-2269142). Yonsei University.

4. (2020). GUI-based fire simulation service provision method (Korean Patent No. 10-2147256). Yonsei University.
5. (2020). Mobile-based augmented reality display device (Korean Patent No. 10-2145135). Sejong University.

GRANTS AND FUNDING

As PRINCIPAL INVESTIGATOR (PI)

PERIOD	TITLE	AGENCY
2026	Bio-signal Based Sleep App UX/UI Development Research	Sleepwave Inc.
2025	Research on Focus Enhancement App Service Applying Delightful UX	Sleepwave Inc.
2025-2026	(Co-PI) XR Space-Responsive Content Optimization: Multimodal UX Evaluation Platform Development	Korea Creative Content Agency
2023-2024	UX/UI Improvement and Digital Strategy for JFWF Website	Korea Food & Wine Festival
2022-2025	Digital Human Production Technology Using Big Five Personality Traits	National Research Foundation of Korea
2022-2023	Intelligent Virtual Assistant (IVA) Appearance Research for Meta-Mobility	Hyundai NGV
2022-2023	Web Usability Analysis and Development for Digital Transformation	Korea Food & Wine Festival
2021	LG Electronics Changwon Showroom Content Production	Creative Brewery Inc.

As CO-INVESTIGATOR

PERIOD	TITLE	AGENCY
2024	XR Space-Responsive Content Optimization: Multimodal UX Evaluation Platform	Korea Creative Content Agency
2022	VR/AR Content Development for Brain Science Exhibition	National Research Foundation of Korea

As RESEARCHER

PERIOD	TITLE	AGENCY
2017-2020	Urban Disaster Evacuation Management Simulation Program Development (4 phases)	Gwangju Institute of Science and Technology
2017-2018	Multi-viewpoint Content Production Tool: University-linked Technology Diffusion Model	ETRI
2017-2018	Persuasion Framework-based Smart Home Interaction Platform Development	Korea Institute for Advancement of Technology
2017	VR Content Experience Based on Solar System Planet Characteristics	Korea Foundation for the Advancement of Science and Creativity

AWARDS AND HONORS

ACADEMIC

- Encouragement Award (Student Advisee), 2023 Fall DSUS, Korean Society of Design Science (2023)
- Best Paper Award, Archives of Design Research, SCOPUS (2019)

- Encouragement Award, 7th Urban Environment EDISON SW Competition (2018)

DESIGN

- Nominee, UX Design Awards 2026 (New Talent Category), International Design Center Berlin, Germany — Focus Stella, advised student project (Yeonwoo Lee, Sujeong Kang), Kookmin University (2026)

FILM & ANIMATION

- (Char. Rigger, Modeler) Best Student Project Prize, SIGGRAPH 2010, "The Wonder Hospital" (2010)
- (Char. Rigger, Modeler) Best Short Animation, SIFF, "The Wonder Hospital" (2010)
- (SFX, Tech. Advisor) Best Animation Award, Hollywood Film Festival, "Stories from a Perch" (2009)
- (Animation Assistant, Compositor) Annie Awards Nominee, "The Chestnut Tree" (2008)

Contributed as Character Rigger/TD to short films screened and awarded at 50+ international film festivals (2007-2016).

SCHOLARSHIPS

- Yonsei University RA/TA Assistantship, BK21 Plus, and Research Competency Scholarship (2017-2020)
- Carnegie Mellon University Graduate Study Scholarship, Korea Creative Content Agency (KOCCA) (2011-2012)
- California Institute of the Arts Scholarship (2007-2008)

TEACHING EXPERIENCE

GRADUATE

Nonlinear Narrative Design I & II, Entertainment Media, Design Research Methodology, Design Technology Seminar, Media Technology Studio, Data-Driven Innovative Design Studio

UNDERGRADUATE

VR/AR Integrated Design, Digital Drawing, Interactive Design and Production, Motion Design Fundamentals, Digital Twin with Unity

RECOGNITION

Top 2.43% in teaching evaluation scores (2021)

ADVISING AND MENTORING

PH.D. STUDENTS

- Sunyoung Kil — Digital storytelling, exhibition and video design
- Ping Ai — Industrial design, media art

MASTER'S STUDENTS

- Sujeong Kang — XR interface, UX research
- Sunghun Park — HCI, interactive media, AI
- Dawon Lee — CX design, service design
- Chanmi Lee — Media art, cultural content
- Yujin Kim — UX/UI design, HCI
- Pham Thi Duyen — HCI, experience design
- Seohyun Lee — AI, media art, interactive media

CREATIVE & INDUSTRY PRACTICE

EXHIBITIONS

- (2024) Galactic Dreamscape. KSDS Spring International Invited Exhibition.

- (2022) MetaDEx: Metaverse, Design & Experiment (17th Formative Arts Exhibition). Virtual Exhibition Director, Kookmin University. (8,800+ visitors)
- (2019) HeliRun (VR Game with Brainwave). Director, Interactive Exhibition.
- (2015-2017) Art Toy Culture Exhibitions, Seoul.

SELECTED FILMOGRAPHY

YEAR	TITLE	ROLE	RECOGNITION
2016	The Inksect	Character Rigger	CSFF Award Winner
2015	The Magic Flute	Technical Producer	
2013	Mosquito (Music Video)	Character TD	
2010	The Wonder Hospital	Char. Rigger, Modeler	Best Student Project Prize, SIGGRAPH 2010 + 16 festivals
2009	Stories from a Perch	SFX, Tech. Advisor	Hollywood FF Best Animation
2007	The Chestnut Tree	Animation Assistant	Annie Awards 2008 Nominee

Full Filmography: [imdb.com/name/nm3297594](https://www.imdb.com/name/nm3297594)

Character TD Demo Reel: vimeo.com/69092148

INDUSTRY & OUTREACH PROJECTS

YEAR	PROJECT / ACTIVITY	ROLE	NOTES
PYPEP DESIGN STUDIO			
2016	Samsung Gear S3 Physical User Interface (PUI) design	Creative Director	Samsung Electronics
2016–2019	Sculpstore website design	Creative Director	client: Sculpstore
2015–2017	Art toy product design (Birdii, Dochii series)	Creative Director	PYPEP own brand
CMU ENTERTAINMENT TECHNOLOGY CENTER • INDUSTRY COLLABORATION			
2012	BarrelEye	Technical Artist / Associate Producer	with Electronic Arts
2012	NuAds	UX Designer (Intern)	with Microsoft
2012	Wall#	Technical Artist	Xbox 360 prototype
SW-CENTERED UNIVERSITY PROGRAM — SEJONG UNIVERSITY			
2016–2018	Coding clubs	Program operator	undergraduate
2016–2018	High school mentoring	Mentor	Seoul / Gyeonggi
2016–2018	4th Sejong SW Competition (Python)	Problem committee member	national-level

PROFESSIONAL ACTIVITIES

EDITORIAL & REVIEW

- Reviewer, Korean Society of Design Science, 2022 – present
- Reviewer, International Journal of Psychophysiology (Elsevier), 2026
- Reviewer, Multimedia Tools and Applications (Springer), 2026
- Reviewer, ACM UIST 2026 (Symposium on User Interface Software and Technology) — *Special Recognition for Outstanding Review*
- Reviewer, National R&D Projects, Korea, 2025.01 & 2025.07

COMMITTEE & SERVICE

- Executive Board Member, International Division, Korean Society of Design Science, 2026 — present
- Virtual Exhibition Director, 17th Kookmin Univ. Formative Arts Exhibition MetaDEx, 2022

MEMBERSHIPS

- Korean Society of Design Science (KSDS), Korean HCI Society, ACM SIGCHI, 2025 – present

TALKS

- (2023) Collaboration between Designers and Generative AI. KSDS 2023 Fall International Academic Conference, Seoul, Korea.
- (2021) The Impact of Virtual Space Experience on Memory. KOSMA 2021 Fall Symposium & International Invitational Exhibition, Seoul, Korea.

TECHNICAL SKILLS

Software: Unity, Unreal Engine, TouchDesigner, Maya, Blender, After Effects, Premiere Pro

Programming: C#, Python, Processing

Specializations: VR/AR Development, Real-time Graphics, Character Rigging, Motion Capture

Languages: Korean (Native), English (Fluent)

Updated: July 2026