Heeyeon Kim

✉ heeyeona@postech.ac.kr   📞 +82-10-9478-7218   🏠 https://hee-yeon-kim.github.io/

RESEARCH INTEREST

Human-Computer Interaction (HCI), Multimodal interface for AR/VR

EDUCATION

Pohang University of Science and Technology (POSTECH)   *Sep. 2022-Aug. 2024*
M.S in Convergence IT Engineering
Advisor: Seungmoon Choi
Thesis: Expressing the Social Intent of Touch Initiator in Virtual Reality Using Multimodal Haptics
Thesis Committee: Seungmoon Choi, Sung H. Han, Inseok Hwang
GPA: 4.3/4.3

Pohang University of Science and Technology (POSTECH)   *Feb. 2018-Aug. 2022*
B.S in Convergence IT Engineering
GPA: 3.81/4.3 (Major: 3.96), *Magna cum laude*

EXPERIENCE

POSTECH Interaction Lab, Pohang, South Korea   *Sep. 2022-Aug. 2024*
Research Associate
Advisor: Seungmoon Choi.
Research on multimodal interfaces in virtual reality, human haptic perception

POSTECH Interaction Lab, Pohang, South Korea   *Jan. 2022-Feb. 2022*
Research Intern
Advisor: Seungmoon Choi.
Research on the development of real-virtual blended exhibits for embodied learning of scientific principles

KAIST Lifelike Avatar & Agent Lab, Daejeon, South Korea   *Aug. 2021-Nov. 2021*
Research Intern
Advisor: Sung-Hee Lee.
Research on real-time hand gesture retargeting for remote operators

Samsung Electronics Mobile Division, Mobile Application Development Team   *Jan. 2021-Feb. 2021*
SW Engineer Intern
Worked on developing an innovative mobile messaging interface
Creathon Project: Location-based AR Social Creation Platform (ARtist)

POSTECH Innovative Medical Solution Lab, Pohang, South Korea   *Jun. 2020-Jan. 2021*
Research Intern
Advisor: Sung-Min Park. Research on IoT-based Stress Biofeedback System

MIT Hacking Arts Hackathon, Boston, United States   *Dec. 2019*
Participated in a 24-hour hackathon, developing a program that creates melodies through interactive gameplay

Stony Brook University, New York, United States   *Sep. 2019-Dec. 2019*
Short-term study abroad

Rhode Island School of Design, Kruger National Park, South Africa   *Jun. 2019-Jul. 2019*
Participated in Global Summer Studios: Art + Science of Conservation

PUBLICATIONS

Conference Papers

[C4] **Heeyeon Kim**, and Seungmoon Choi, "Expressing the Social Intent of Touch Initiator in Virtual Reality Using Multimodal Haptics", In *Proceedings of the IEEE International Symposium on Mixed and Augmented Reality (ISMAR)*, 2024 (Acceptance rate 31%)

[C3] Junwoo Kim*, **Heeyeon Kim***, Chaeyong Park, and Seungmoon Choi, "Human Recognition Performance of Simple Spatial Vibrotactile Patterns on the Torso," In *Proceedings of the IEEE World Haptics Conference (WHC)*, pp. 20-27, July 9-12, 2023 (* Co-first authors).

[C2] Junwoo Kim, **Heeyeon Kim**, Chaeyong Park, and Seungmoon Choi, "Spatial Masking Effect Based on the Intensity of Vibrotactile Stimuli Using a Haptic Suit," In *Proceedings of HCI Korea*, pp. 348-353, February 1-3, 2023.

[C1] **Heeyeon Kim**, Sarang Kim, and Seungmoon Choi, "Walk With Me: Augmented Reality Pet to Increase Physical Activity," In *Proceedings of HCI Korea*, pp. 777-780, February 9-11, 2022.

Workshop Presentation, Demos

[W1] **Heeyeon Kim**, and Seungmoon Choi, "Multimodal Haptic Feedback for effectively expressing the social intent of touch gestures in VR", Applications and Future Directions of Affective Technologies Workshop, International Conference on Robotics and Automation (ICRA), May 13, 2024.

[D3] **Heeyeon Kim**, Jaehyeok Ahn, Heeji Sohn, Jiwan Lee, and Seungmoon Choi, "Comfort-Inducing Haptic Rendering for Relaxation in Virtual Reality," Creative Award, *HCI Korea*, pp. 1195-1197, 2024.

[D2] **Heeyeon Kim** and Seungmoon Choi, "VR Pet Therapy with a Multimodal Interface" In *Proceedings of Korea Haptics Conference*, November 22-24, 2023.

[D1] Jeongwoo Kim, Jungeun Lee, Chaeyong Park, **Heeyeon Kim**, and Seungmoon Choi, "Wearable Haptic Device for Tactile-based Cue Delivery," In *Proceedings of Korea Haptics Conference*, November 22-24, 2023.

GRANTS, AWARDS

Best Poster Presentation Award
Applications and Future Directions of Affective Technologies Workshop,
IEEE International Conference on Robotics and Automation (ICRA)
2024

Best Creative Engineering Design Award
Project: "Biofeedback-Enhanced Virtual Reality Exposure Therapy for Public Speaking Anxiety"
POSTECH, School of Creative IT Engineering
2021

Earned Excellence in AR VR Content Idea Contest
Project: "AR-based POSTECH Campus Guide and Management Platform"
POSTECH, Innovation Center for Education
2021

ICT Creative Consilience Program - Scholarship
$ 20000 over 3 years
Institute of Information & communications Technology Planning & Evaluation (IITP), Korea
2018-2020