

# Haejun Kim

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 [website](#)

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## EDUCATION

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- **Korea Advanced Institute of Science and Technology (KAIST)** — M.S. student in Data Science. Mar. 2024 – Feb. 2026 (expected). Advisor: Shuping Xiong.
- **Hanyang University** — B.A. in Philosophy; Second Major in Industrial Engineering. Mar. 2018 – Feb. 2024. cum laude

*Thesis: VHDT: Vision and Human-Object Interaction Detection Transformer based on ViDT*

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## PUBLICATIONS

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(<sup>†</sup>Co-first authors; <sup>\*</sup>Corresponding authors.)

### Conference & Journal Papers

- [c.1] **Toward a More Standardized Multi-directional Tapping Task in VR: The Effect of Target Depth**  
**Haejun Kim**, Yuhwa Hong, Jihae Yu, Shuping Xiong\*, Woojoo Kim\*.  
ISMAR 2025: IEEE International Symposium on Mixed and Augmented Reality.
- [j.1] **The Effects of Task Factors on the Multi-Directional Tapping Task**  
Yuhwa Hong<sup>†</sup>, **Haejun Kim<sup>†</sup>**, Jihea Yu, Heedo Shin, Xiaoqun Yu, Shuping Xiong\*,  
Woojoo Kim\*.  
International Journal of Human-Computer Interaction (IJHCI, In press)
- [j.2] **Effects of a Passive Shoulder Support Exoskeleton and Keyboard Interaction Design on Mid-Air Typing in Mixed Reality**  
**Haejun Kim**, Qiuli Jin, Seonghyeok Park, Woojoo Kim\*, Shuping Xiong\*.  
(IJHCI, In press).

### Under Review

- [u.1] **Effects of Adaptive UI Transparency Control on XR Walking and Pedestrian Avoidance**  
**Haejun Kim**, Qiuli Jin, Shuping Xiong\*, Woojoo Kim\*.  
International Journal of Human-Computer Studies.

### Posters, Demos, and Workshop Papers

- [p.1] **HickStudyVR: A Hicks Law-Based Information Processing Speed Test in VR for Large Choice Sets**  
Junha Choe, Hyeeun Cho, **Haejun Kim**, Woojoo Kim.  
ISMAR 2025 (Poster).
- [p.2] **The Effect of Target Depth on Performance of Multi-directional Tapping Task in Virtual Reality**  
**Haejun Kim**, Yuhwa Hong, Jihae Yu, Shuping Xiong, Woojoo Kim.  
CHI EA 2025 Extended Abstracts: ACM Conference on Human Factors in Computing Systems (Poster).
- [p.3] **ChaMEleon: Identity-Adjustable Remote Collaboration System in Virtual**

## **Reality**

Hyunyoung Han, **Haejun Kim**, Junseo Lee, Woontack Woo.  
HCI Korea 2025 (Poster).

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## **ONGOING RESEARCH PROJECTS**

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- **Human Factor and AI-Based UX Prediction of Spatial User Interfaces**  
Kangwon National University Collaboration | July. 2025 – Present  
Predicting UX metrics during XR interactions using AI models with EMG and IMU sensor data; developing multimodal prediction framework.
  - **Adaptive UI for XR: Investigating UX and User Behavior During Walking**  
For master thesis | April. 2025 – Present  
Real-time UI transparency control algorithm development and user-based study for adaptive spatial interfaces during walking in XR environments
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## **WORK EXPERIENCE**

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- **KAIST Human Factors & Ergonomics Lab**, South Korea Jul. 2023 – Sep. 2023  
Undergraduate Researcher  
Analyzed gait in VR across avatar fidelity levels; supported experiment design, data collection, and analysis.
  - **Republic of Korea Army**, South Korea Apr. 2021 – Jan. 2023  
Mandatory Military Service  
Completed compulsory national service.
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## **AWARDS & HONORS**

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- **Future Research Award** Korean Data Science Society, Sep. 2025  
Awarded for outstanding research presented at the Korean Data Science Conference.
  - **Q-Day Special Student Award** KAIST, Nov. 2024  
Recognized for contributing to a campus culture of questioning and for outstanding performance in creative education & research through active participation in “QAIST.”
  - **Hanyang Brain (Academic Excellence) Scholarship** Hanyang University  
Outstanding academic performance (Fall 2018, Spring 2019, Spring 2020, Fall 2020, Fall 2023).
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## **LEADERSHIP & SERVICE**

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- **Executive Member, BOAZ Big Data Analysis Club** Aug 2021–Jul 2022  
Organized data analytics & machine learning training sessions; coordinated multi-team student projects; mentored junior members.

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## SKILLS

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- **Languages:** English (fluent), Korean (native)
  - **Software:** Python, Unity, XR development, Minitab.
  - **Instrumentation & Sensors:** OptiTrack motion capture, Xsens inertial motion capture, Delsys surface EMG, Tobii eye-tracking.
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## REFERENCES

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- **Prof. Shuping Xiong**  
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Website: <https://hfel.kaist.ac.kr/>
- **Prof. Woojoo Kim**  
Assistant Professor, Division of Liberal Studies, College of Global Future Convergence, Kangwon National University  
Email: [woojoo.kim@kangwon.ac.kr](mailto:woojoo.kim@kangwon.ac.kr)  
Website: <https://hfm.kangwon.ac.kr/members/professor>