Changhyeon Park

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Daejeon, Republic of Korea

Education

- **KAIST (Korea Advanced Institute of Science and Technology)** *Mar. 2024 - present*
  M.S. in Graduate School of Culture Technology Daejeon, S.Korea
  - Advisor: Prof. Sang Ho Yoon

- **Hongik University** *Mar. 2018 - Feb. 2024*
  B.S. in Computer Engineering Seoul, S.Korea
  - GPA: 4.13/4.5
  - Advisor: Prof. Jaeyoung Park

Research Interests

I am interested in context-aware sensing systems that utilize user and physical data to support seamless and meaningful interactions. My goal is to enable a wide range of applications on wearable devices and mobile platforms by leveraging **sensing** data to interpret context and guide interaction.

Publications

C=Conference, J=Journal, P=Patent, S=In Submission, T=Thesis

[J.3] **Changhyeon Park**, Yubin Lee, and Sang Ho Yoon. (2025). **UltraBoard: Always-available Wearable Ultrasonic Mid-air Haptic Interface for Responsive and Robust VR Inputs**. *Proc. ACM Interact. Mob. Wearable Ubiquitous Technol.* 9, 2, Article 44 (June 2025), 31 pages. https://doi.org/10.1145/3731413

[J.2] **C. Park**, S. Hong and J. Park, (2024). **Effect of Rendering Virtual Vibrotactile Motion on the Perceived Lateral Force**. *IEEE Access*, vol. 12, pp. 173792-173799, doi: 10.1109/ACCESS.2024.3502903.

[J.1] **C. Park**, J. Park, (2024). **Virtual Object Weight Information with Multi-modal Sensory Feedback during Remote Manipulation**. *Journal of Internet Computing and Services*, 25(1), 9–15. https://doi.org/10.7472/JKSII.2024.25.1.9

[C.2] **C. Park***, Y. Sung, S. Yoon, (2024).**VRmoji: Natural Avatar Movement based on Real-time Facial Expression Recognition System**. *Korea Computer Congress*, 1468-1470.

[C.1] **C. Park**, N. Yoon, J. Park, (2022).**A Multi-Finger Haptic Interface Rendering Resistive Force Using Apparent Tactile Motion**. *Korean Society of Mechanical Engineers*, 2805-2807.

Projects

- **Facial Recognition Smart Cap for Convenient Typing System** *Mar. 2024 - June. 2024*
  [Wearable facial Recognition System | Tiny ML | KAIST EE488 Course Project] pdf
- **VRMoji:Natural Avatar Movement based on Real-time Facial Expression Recognition system** *Mar. 2024 - June. 2024*
  [HMD Expression Recognition System | Unity, OpenCV | KAIST GCT623 Course Project] pdf
- **ImaginARyDance: Multi-Limb Dance Motion Guidance in XR using Metaphoric Imagery** *Sep. 2024 - Dec. 2024*
  [Dance Motion Guidance in VR | Unity | KAIST CS584 Course Project] pdf
- **Ultrasonic Hand Gesutre Classification for Realtime interactive music control** *Mar. 2025 - June. 2025*
  [Ultrasound hand gesture classification | Arduino | KAIST GCT600 Course Project] pdf

Honors and Awards

- **Academic excellence scholarships, Hongik University** *Spring 2019, Fall 2021, Spring/Fall 2022, Spring 2023*

- **Full-tuition Government Scholarship for Science and Engineering, KAIST** *2024 - present*

Academic Services

- **CHI LBW** 2023, 24
- **AHs** 2024

Teaching

- **Teaching Assistant, GCT623 Interaction Sensing Principle & Application, KAIST** *Spring 2025*