Taejun Kim

CONTACT

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RESEARCH INTERESTS

My research focuses on understanding human oculomotor behaviors and identifying new opportunities to enhance vision- and eye-related user interactions. In addition to this primary interest, I've explored various topics such as haptics and text entry.

PUBLICATIONS

International Conference Papers

1. **QuadStretcher: A Forearm-Worn Skin Stretch Display for Bare-Hand Interaction in AR/VR**
   Taejun Kim, Youngbo Aram Shim, YoungIn Kim, Sunbum Kim, Jaeyeon Lee, Geehyuk Lee
   CHI 2024: ACM Conference on Human Factors in Computing Systems (acceptance ratio: 26.3%)
   https://doi.org/10.1145/3613904.3642067
2. **STAR: Smartphone-Analogous Typing in Augmented Reality**
   Taejun Kim, Amy Karlson, Aakar Gupta, Tovi Grossman, Jason Wu, Parastoo Abtahi, Christopher Collins, Michael Glueck, Hemant Bhaskar Surale
   UIST 2023: ACM Symposium on User Interface Software and Technology (acceptance ratio: 25.1%)
   https://doi.org/10.1145/3586183.3606803
3. **Lattice Menu: A Low-Error Gaze-Based Marking Menu Utilizing Target-Assisted Gaze Gestures on a Lattice of Visual Anchors**
   Taejun Kim, Auejin Ham, Sunggeun Ahn, Geehyuk Lee
   CHI 2022: ACM Conference on Human Factors in Computing Systems (acceptance ratio: 12.5%)
   https://doi.org/10.1145/3491102.3501977
4. **Heterogeneous Stroke: Using Unique Vibration Cues to Improve the Wrist-Worn Spatiotemporal Tactile Display**
   Taejun Kim, Youngbo Aram Shim, Geehyuk Lee
   CHI 2021: ACM Conference on Human Factors in Computing Systems (acceptance ratio: 26.3%)
   https://doi.org/10.1145/3411764.3445448

International Journal Papers

1. **WristMenu with Tactons: An Eyes- and Ears-free Menu with Tactons Describing Menu Items in the Wrist Rotation Space**
   Eunhye Youn, **Taejun Kim**, Geehyuk Lee
   IJHCI 2022: International Journal of Human-Computer Interaction (Impact Factor: 3.353)
   https://doi.org/10.1080/10447318.2022.2159780

Extended Abstracts: Posters and Demos

1. **QuadStretch: A Forearm-wearable Multi-dimensional Skin Stretch Display for Immersive VR Haptic Feedback**
   Youngbo Aram Shim, **Taejun Kim**, Geehyuk Lee
   CHI 2022 Interactivity: ACM Conference on Human Factors in Computing Systems
   https://doi.org/10.1145/3491101.3519908

PROFESSIONAL EXPERIENCE

Meta Reality Labs, Toronto, Canada JUN. 2022 – DEC. 2022
Ph.D. Research Intern
Advisors: Hemant Surale, Amy Karlson, and Aakar Gupta

AWARDS & HONOR

CHI '22 Best Demo Award, ACM Conference on Human Factors in Computing Systems — MAY. 2022
Demonstrating "QuadStretch: A Forearm-wearable Multi-dimensional Skin Stretch Display for Immersive VR Haptic Feedback"

Outstanding Master's Thesis Award, KAIST School of Computing — FEB. 2021
Thesis Title: "Improving Recognition Accuracy of Wrist-Worn Spatiotemporal Tactile Display using Heterogeneous Vibrotactile Stimuli"

Naver PhD Fellowship, Naver Corp. — DEC. 2022
Ph.D. Fellowship

Inseo Precision Engineering Fellowship, KAIST. — MAY. 2023
Ph.D. Fellowship

Kim Young Han Global Leader Fellowship, KAIST. — JUL. 2023
Ph.D. Fellowship

2024 Global Leadership Awards, President of KAIST. — FEB. 2024
Ph.D. Award

KIA Research Fellowship, Kia Motors Corp. — MAR. 2024
Ph.D. Fellowship

EDUCATION

Korea Advanced Institute of Science and Technology (KAIST) — Daejeon, Korea
Ph.D. Candidate in Computer Science — SEP. 2020 – Present
Advisor: Geehyuk Lee, Ph.D.

Korea Advanced Institute of Science and Technology (KAIST) — Daejeon, Korea
M.S. in Computer Science — 2020
Thesis: "Improving Recognition Accuracy of Wrist-Worn Spatiotemporal Tactile Display using Heterogeneous Vibrotactile Stimuli"
Advisor: Geehyuk Lee, Ph.D.

Korea Advanced Institute of Science and Technology (KAIST) — Daejeon, Korea
B.S. in Computer Science — 2018

INVITED TALKS

Haptics, Text Entry, and Gaze Interaction — MAY. 2024
Interactive Wearable Computing Lab Class, KAIST, Host: Ian Oakley

Interface Control with Eye Movement — MAR. 2023
High-Beams seminar series, University College London, Host: Kaan Akşit

Interface Control with Eye Movement — NOV. 2022
Stanford HCI Lunch, Stanford University, Host: Sean Liu

Interface Control with Eye Movement — NOV. 2022
DGP Lab, University of Toronto, Host: Karthik Mahadevan

ACADEMIC SERVICE

Reviewer (18)
CHI 2024*
UIST 2024
CHI LBW 2024*
MobileHCI 2024
ETRA Short Papers 2023, 2024
WHC 2023*
INTERACT 2023
(*Special recognition for outstanding reviews)

TEACHING

Guest Lecturer — OCT. 2021

Lecture on SPSS & R practice, CS584, KAIST

Teaching Assistant

CS492 Wearable User Interface, KAIST	Spring 2023
CS584 Human-Computer Interaction, KAIST	Fall 2021
CS550 Software Engineering, KAIST	Spring 2021
CS300 Introduction to Algorithms, KAIST	Fall 2020
CS204 Discrete Mathematics, KAIST	Spring 2019
CS230 System Programming, KAIST	Spring 2018
CS101 Introduction to Programming, KAIST	Fall 2017