Taejun Kim

CONTACT Ph.D. Candidate

School of Computing, KAIST

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RESEARCH INTERESTS

My research focuses on understanding human eye behaviors and improving user interactions related to gaze and vision. Aside from this primary interest, I've also researched broader topics like haptics and text entry.

PROFESSIONAL EXPERIENCE

Meta Reality Labs, Toronto, Canada

Jun. 2022 – Dec. 2022

Ph.D. Research Intern

Managers: Hemant Surale, Amy Karlson, and Aakar Gupta

PUBLICATIONS

International Conference Papers

- Palmrest+: Expanding Laptop Input Space with Shear Force on Palm-Resting Area
 Jisu Yim, Seoyeon Bae, Taejun Kim, Sunbum Kim, Geehyuk Lee
 UIST 2024: ACM Symposium on User Interface Software and Technology (acceptance ratio: 24.0%)
 https://doi.org/10.1145/3654777.3676371
- 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
- 3. 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

4. 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

5. 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

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CHI 2022 Interactivity: ACM Conference on Human Factors in Computing Systems https://doi.org/10.1145/3491101.3519908

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

Introduction To Human-Computer Interaction, UNIST, Host: Jaeyeon Lee

Haptics, Text Entry, and Gaze Interaction

MAY. 2024

Interactive Wearable Computing Lab, 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 (25)

CHI 2024*, 2025*

UIST 2024*

CHI LBW 2024* MobileHCI 2024

ETRA Short Papers 2023, 2024

ISS 2024

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SIGGRAPH Asia ET 2024 WHC 2023* INTERACT 2023 (*Special recognition for outstanding reviews)

TEACHING Guest Lecturer OCT. 2021

Lecture on SPSS & R practice, CS584, KAIST