Taejun Kim

CONTACT Email: taejun22222@gmail.com

URL: https://taejunkim.com

RESEARCH INTERESTS PROFESSIONAL $Eye\ tracking,\ Gaze\ analysis,\ Gaze\ -interactive\ application,\ AR/VR,\ User\ behavior\ modeling.$

Future Interface Group, Carnegie Mellon University, Pittsburgh, USA

EXPERIENCE Visiting Researcher

Advisor: Chris Harrison

Meta Reality Labs, Toronto, Canada

JUN. 2022 – DEC. 2022

MAY. 2025 – Present

Ph.D. Research Intern

Managers: Hemant Surale, Amy Karlson, and Aakar Gupta

PUBLICATIONS

Note about conference papers: in Human-Computer Interaction, top-tier conferences maintain highly selective standards, subjecting full manuscripts to a rigorous, multi-stage review process. This results in high-quality archival proceedings, making conference proceedings the preferred publication venue for greatest impact.

Note about venues: CHI (the ACM Conference on Human Factors in Computing Systems) and UIST (the ACM symposium on User Interface Software and Technology) are both recognized as very top tier HCI conferences (Google Scholar and Microsoft Academic both rank them as #1 and #3). The average acceptance rate for CHI is 23% and UIST 21%.

International Conference Papers

- 1. TwinSpin: A Virtual Ball in a VR Controller Enabling In-Hand 3DoF Rotation Changsung Lim, Taejun Kim, Geehyuk Lee
 UIST 2025: ACM Symposium on User Interface Software and Technology (acceptance ratio: TBU%)
 https://doi.org/10.1145/3746059.3747735
- 2. Typing Haptically: Towards Enabling Non-auditory Smartphone Text Entry with Haptic Feedback for Blind and Low Vision Users

Jisu Yim, Donghyeon Ko, Taeho Kim, **Taejun Kim**, Jonggi Hong, Geehyuk Lee UIST 2025: ACM Symposium on User Interface Software and Technology (acceptance ratio: TBU%) https://doi.org/10.1145/3746059.3747801

- 3. Over the Mouse: Navigating across the Z-dimension of GUI with Finger-Lifting Operations YoungIn Kim, Yohan Yun, Taejun Kim, Geehyuk Lee CHI 2025: ACM Conference on Human Factors in Computing Systems (acceptance ratio: 25.1%) http://doi.org/10.1145/3706598.3713340
- 4. 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
- 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

7. Lattice Menu: A Low-Error Gaze-Based Marking Menu Utilizing Target-Assisted Gaze Gestures on a Lattice of Visual Anchors

TAEJUN KIM 1 Last update: September 29, 2025

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

8. 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. Tension&Gaze: Gaze-Responsive UI Gated by Finger Tension

Taejun Kim, Ludwig Sidenmark, Parastoo Abtahi, Jisu Yim, YoungIn Kim, Geehyuk Lee UIST 2025 Demo: ACM Symposium on User Interface Software and Technology (acceptance ratio: TBU%)

https://doi.org/10.1145/3746058.3759018

2. **QuadStretch:** A Forearm-wearable Multi-dimensional Skin Stretch Display for Immersive VR Haptic Feedback

Youngbo Aram Shim, Taejun Kim, Geehyuk Lee

CHI 2022 Demo: ACM Conference on Human Factors in Computing Systems

https://doi.org/10.1145/3491101.3519908

3. QuadStretch: A Forearm-wearable Skin Stretch Display for Immersive VR Experience

Youngbo Aram Shim, **Taejun Kim**, Sangyoon Lee, Geehyuk Lee

Siggraph Asia Emerging Technology Systems

http://doi.org/10.1145/3550471.3564761

Jang Young Sil Postdoctoral Fellowship, KAIST.

AWARDS & HONOR

Outstanding Master's Thesis Award, KAIST School of Computing

FEB. 2021

APR. 2025

Thesis Title: "Improving Recognition Accuracy of Wrist-Worn Spatiotemporal Tactile Display using Heterogeneous Vibrotactile Stimuli"

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"

Naver PhD Fellowship, Naver Corp. Ph.D. Fellowship - 5 Million KRW	DEC. 2022
Inseo Precision Engineering Fellowship, KAIST. Ph.D. Fellowship - 1 Million KRW	May. 2023
Kim Young Han Global Leader Fellowship , KAIST. Ph.D. Fellowship - 4 Million KRW	Jul. 2023
2024 Global Leadership Awards , President of KAIST. Ph.D. Award - 1 Million KRW	FEB. 2024
KIA Research Fellowship , KIA Motors Corp. Ph.D. Fellowship - 3 Million KRW	Mar. 2024

TAEJUN KIM 2 Last update: September 29, 2025

Postdoctoral Fellowship - 50 Million KRW

EDUCATION Korea Advanced Institute of Science and Technology (KAIST)

Daejeon, Korea

2020

2018

Ph.D. in Computer Science 2025

Advisor: Geehyuk Lee

Korea Advanced Institute of Science and Technology (KAIST)

Daejeon, Korea

M.S. in Computer Science

Thesis: "Improving Recognition Accuracy of Wrist-Worn Spatiotemporal Tactile Display using Heteroge-

neous Vibrotactile Stimuli" *Advisor*: Geehyuk Lee

Korea Advanced Institute of Science and Technology (KAIST)

Daejeon, Korea

B.S. in Computer Science

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 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 Program Committee

CHI LBW 2025: Associate Chair ETRA Short Papers 2023-2025

Reviewer (40)

CHI 2024*, 2025*, UIST 2024*, 2025, CHI LBW 2024*, 2025, ETRA Short Papers 2023-2025, MobileHCI 2024, AH 2025, ISS 2024, SIGGRAPH Asia ET 2024, WHC 2023*, INTERACT 2023

(*Special recognition for outstanding reviews)

Session Chair

CHI 2025: Haptic Technology Session

TEACHING Guest Lecturer Oct. 2021

Lecture on SPSS & R practice, CS584, KAIST

Teaching Assistant

CS492 Wearable User Interface, KAIST

CS584 Human-Computer Interaction, KAIST

CS550 Software Engineering, KAIST

CS300 Introduction to Algorithms, KAIST

CS204 Discrete Mathematics, KAIST

CS230 System Programming, KAIST

CS230 System Programming, KAIST

CS101 Introduction to Programming, KAIST

Fall 2017

TAEJUN KIM 3 Last update: September 29, 2025