

# Taejun Kim

CONTACT	Ph.D. Candidate School of Computing, KAIST Email: taejun.kim@kaist.ac.kr URL: https://taejunkim.com	Kim Byung Ho IT Building (N1) #722 KAIST, 291 Daehak-ro, Yuseong-gu Daejeon 34141, Republic of Korea
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.	
PUBLICATIONS	<div>International Conference Papers</div> <div><div>1. <b>Palmrest+: Expanding Laptop Input Space with Shear Force on Palm-Resting Area</b> Jisu Yim, Seoyeon Bae, <b>Taejun Kim</b>, Sunbum Kim, Geehyuk Lee UIST 2024: ACM Symposium on User Interface Software and Technology (acceptance ratio: 24.0%) (DOI TBU)</div><div>2. <b>QuadStretcher: A Forearm-Worn Skin Stretch Display for Bare-Hand Interaction in AR/VR</b> <b>Taejun Kim</b>, 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%) <a href="https://doi.org/10.1145/3613904.3642067">https://doi.org/10.1145/3613904.3642067</a></div><div>3. <b>STAR: Smartphone-Analogous Typing in Augmented Reality</b> <b>Taejun Kim</b>, 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%) <a href="https://doi.org/10.1145/3586183.3606803">https://doi.org/10.1145/3586183.3606803</a></div><div>4. <b>Lattice Menu: A Low-Error Gaze-Based Marking Menu Utilizing Target-Assisted Gaze Gestures on a Lattice of Visual Anchors</b> <b>Taejun Kim</b>, Auejin Ham, Sunggeun Ahn, Geehyuk Lee CHI 2022: ACM Conference on Human Factors in Computing Systems (acceptance ratio: 12.5%) <a href="https://doi.org/10.1145/3491102.3501977">https://doi.org/10.1145/3491102.3501977</a></div><div>5. <b>Heterogeneous Stroke: Using Unique Vibration Cues to Improve the Wrist-Worn Spatiotemporal Tactile Display</b> <b>Taejun Kim</b>, Youngbo Aram Shim, Geehyuk Lee CHI 2021: ACM Conference on Human Factors in Computing Systems (acceptance ratio: 26.3%) <a href="https://doi.org/10.1145/3411764.3445448">https://doi.org/10.1145/3411764.3445448</a></div></div> <div>International Journal Papers</div> <div><div>1. <b>WristMenu with Tactons: An Eyes- and Ears-free Menu with Tactons Describing Menu Items in the Wrist Rotation Space</b> Eunhye Youn, <b>Taejun Kim</b>, Geehyuk Lee IJHCI 2022: International Journal of Human-Computer Interaction (Impact Factor: 3.353) <a href="https://doi.org/10.1080/10447318.2022.2159780">https://doi.org/10.1080/10447318.2022.2159780</a></div></div> <div>Extended Abstracts: Posters and Demos</div> <div><div>1. <b>QuadStretch: A Forearm-wearable Multi-dimensional Skin Stretch Display for Immersive VR Haptic Feedback</b> Youngbo Aram Shim, <b>Taejun Kim</b>, Geehyuk Lee CHI 2022 Interactivity: ACM Conference on Human Factors in Computing Systems <a href="https://doi.org/10.1145/3491101.3519908">https://doi.org/10.1145/3491101.3519908</a></div></div>	
PROFESSIONAL EXPERIENCE	<b>Meta Reality Labs, Toronto, Canada</b> Ph.D. Research Intern	JUN. 2022 – DEC. 2022

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>

*Managers:* Hemant Surale, Amy Karlson, and Aakar Gupta

AWARDS & HONOR	<b>CHI '22 Best Demo Award</b> , ACM Conference on Human Factors in Computing Systems Demonstrating “QuadStretch: A Forearm-wearable Multi-dimensional Skin Stretch Display for Immersive VR Haptic Feedback”	MAY. 2022
	<b>Outstanding Master’s Thesis Award</b> , KAIST School of Computing Thesis Title: “Improving Recognition Accuracy of Wrist-Worn Spatiotemporal Tactile Display using Heterogeneous Vibrotactile Stimuli”	FEB. 2021
	<b>Naver PhD Fellowship</b> , Naver Corp. Ph.D. Fellowship	DEC. 2022
	<b>Inseo Precision Engineering Fellowship</b> , KAIST. Ph.D. Fellowship	MAY. 2023
	<b>Kim Young Han Global Leader Fellowship</b> , KAIST. Ph.D. Fellowship	JUL. 2023
	<b>2024 Global Leadership Awards</b> , President of KAIST. Ph.D. Award	FEB. 2024
	<b>KIA Research Fellowship</b> , Kia Motors Corp. Ph.D. Fellowship	MAR. 2024
EDUCATION	<b>Korea Advanced Institute of Science and Technology (KAIST)</b> Ph.D. Candidate in Computer Science <i>Advisor:</i> Geehyuk Lee, Ph.D.	Daejeon, Korea SEP. 2020 – Present
	<b>Korea Advanced Institute of Science and Technology (KAIST)</b> M.S. in Computer Science <i>Thesis:</i> “Improving Recognition Accuracy of Wrist-Worn Spatiotemporal Tactile Display using Heterogeneous Vibrotactile Stimuli” <i>Advisor:</i> Geehyuk Lee, Ph.D.	Daejeon, Korea 2020
	<b>Korea Advanced Institute of Science and Technology (KAIST)</b> B.S. in Computer Science	Daejeon, Korea 2018
INVITED TALKS	<b>Haptics, Text Entry, and Gaze Interaction</b> Introduction To Human-Computer Interaction, UNIST, <i>Host:</i> Jaeyeon Lee	MAY. 2024
	<b>Haptics, Text Entry, and Gaze Interaction</b> Interactive Wearable Computing Lab, KAIST, <i>Host:</i> Ian Oakley	MAY. 2024
	<b>Interface Control with Eye Movement</b> High-Beams seminar series, University College London, <i>Host:</i> Kaan Akşit	MAR. 2023
	<b>Interface Control with Eye Movement</b> Stanford HCI Lunch, Stanford University, <i>Host:</i> Sean Liu	NOV. 2022
	<b>Interface Control with Eye Movement</b> DGP Lab, University of Toronto, <i>Host:</i> Karthik Mahadevan	NOV. 2022
ACADEMIC SERVICE	<b>Reviewer (19)</b> CHI 2024* UIST 2024* CHI LBW 2024* MobileHCI 2024 ETRA Short Papers 2023, 2024 ISS 2024 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

**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