

Taejun Kim

CONTACT

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RESEARCH INTERESTS

My curiosity lies in discovering the maximum potential of utilizing our eyes for Human-Computer Interaction, researching opportunities and challenges of gaze-based interactions. Beyond my primary interest, I also have a fascination with 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 (to appear)
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
<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
<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
<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
Ph.D. Research Intern
Advisors: Hemant Surale, Amy Karlson, and Aakar Gupta

JUN. 2022 – DEC. 2022

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 Thesis Title: “Improving Recognition Accuracy of Wrist-Worn Spatiotemporal Tactile Display using Heterogeneous Vibrotactile Stimuli”	FEB. 2021
	Naver PhD Fellowship , Naver Corp. Ph.D. Fellowship	DEC. 2022
	Inseo Precision Engineering Fellowship , KAIST. Ph.D. Fellowship	MAY. 2023
	Kim Young Han Global Leader Fellowship , KAIST. Ph.D. Fellowship	JUL. 2023
	2024 Global Leadership Awards , President of KAIST. Ph.D. Award	FEB. 2024
	KIA Research Fellowship , Kia Motors Corp. Ph.D. Fellowship	MAR. 2024
EDUCATION	Korea Advanced Institute of Science and Technology (KAIST) Ph.D. Candidate in Computer Science <i>Advisor</i> : Geehyuk Lee, Ph.D.	Daejeon, Korea SEP. 2020 – Present
	Korea Advanced Institute of Science and Technology (KAIST) 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
	Korea Advanced Institute of Science and Technology (KAIST) B.S. in Computer Science	Daejeon, Korea 2018
INVITED TALKS	Haptics, Text Entry, and Gaze Interaction Interactive Wearable Computing Lab Class, KAIST, Host: Ian Oakley	MAY. 2024
	Interface Control with Eye Movement High-Beams seminar series, University College London, Host: Kaan Aksit	MAR. 2023
	Interface Control with Eye Movement Stanford HCI Lunch, Stanford University, Host: Sean Liu	NOV. 2022
	Interface Control with Eye Movement DGP Lab, University of Toronto, Host: Karthik Mahadevan	NOV. 2022
ACADEMIC SERVICE	Reviewer (18) CHI 2024* CHI LBW 2024* UIST 2024 MobileHCI 2024 ETRA Short Papers 2023, 2024 WHC 2023* INTERACT 2023 (*Special recognition for outstanding reviews)	
TEACHING	Guest Lecturer Lecture on SPSS & R practice, CS584, KAIST Teaching Assistant	OCT. 2021

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