# Taejun Kim

CONTACT Ph.D. Candidate

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RESEARCH INTERESTS

My curiosity lies in discovering the maximum potential of using our eyes for computer input, which led me to research the opportunities and challenges of utilizing gaze for human-computer interaction. Aside from my primary interest, I also have a fascination with Haptics and text entry.

#### **PUBLICATIONS**

### **International Conference and Journal Papers**

- 1. QuadStretcher: A Forearm-Worn Skin Stretch Display for Bare-Hand Interaction in AR/VR Taejun Kim, Yougnbo Aram Shim, YoungIn Kim, Sunbum Kim, Jaeyeon Lee, Geehyuk Lee CHI 2024: ACM Conference on Human Factors in Computing Systems
- 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

3. 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)

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

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

#### **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

PROFESSIONAL EXPERIENCE

## Meta Reality Labs, Toronto, Canada

JUN. 2022 - DEC. 2022

Ph.D. Research Intern

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

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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

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

2020

M.S. in Computer Science

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

neous 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 Interface Control with Eye Movement MAR. 2023

High-Beams seminar series, University College London

Interface Control with Eye Movement Nov. 2022

Stanford HCI Lunch, Stanford University

Interface Control with Eye Movement Nov. 2022

DGP Lab, University of Toronto

ACADEMIC SERVICE Reviewer (9)

CHI 2024\*: ACM Conference on Human Factors in Computing Systems

CHI LBW 2024: Extended Abstracts of the CHI Conference

WHC 2023\*: IEEE World Haptics Conference

INTERACT 2023: IFIP International Conference on Human-Computer Interaction ETRA Short Papers 2023: ACM Symposium on Eye Tracking Research & Application

(\*Special recognition for outstanding reviews)

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

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