# Taejun Kim

CONTACT Ph.D. Candidate

School of Computing, KAIST

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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**

- 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

## Meta Reality Labs, Toronto, Canada

Jun. 2022 - Dec. 2022

EXPERIENCE

Ph.D. Research Intern

Advisors: Hemant Surale, Amy Karlson, and Aakar Gupta

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

TAEJUN KIM 1 Last update: April 19, 2024

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 SEP. 2020 – Present

Ph.D. Candidate in Computer Science

Advisor: Geehyuk Lee, Ph.D.

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)

**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 (14)

CHI 2024\*

CHI LBW 2024\* MobileHCI 2024

ETRA Short Papers 2023, 2024

WHC 2023\* INTERACT 2023

(\*Special recognition for outstanding reviews)

TEACHING Guest Lecturer

Ост. 2021

Lecture on SPSS & R practice, CS584, KAIST

**Teaching Assistant** 

CS492 Wearable User Interface, KAIST

CS584 Human-Computer Interaction, KAIST

CS550 Software Engineering, KAIST

Spring 2023

Fall 2021

Spring 2021

TAEJUN KIM 2 Last update: April 19, 2024

CS300 Introduction to Algorithms, KAIST CS204 Discrete Mathematics, KAIST CS230 System Programming, KAIST CS101 Introduction to Programming, KAIST Fall 2020 Spring 2019 Spring 2018 Fall 2017

TAEJUN KIM 3 Last update: April 19, 2024