Taejun Kim

CONTACT

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Daejeon 34141, Republic of Korea

RESEARCH INTERESTS

I'm interested in devising new AR/VR interactions utilizing eye gaze movement. The integration of sensing technology into modern wearable devices has opened new possibilities of eye gaze-based interaction. Object-attachable, non-wearable eye tracking products even extend the domain into IoT applications. My research interests include eye gaze-based interaction, AR/VR interfaces, and wearable haptic interfaces.

PUBLICATIONS

International Conference Papers

1. **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
2. **QuadStretch: A Forearm-wearable Multi-dimensional Skin Stretch Display for Immersive VR Haptic Feedback**
   Youngbo Aram Shim, **Taejun Kim**, Geehyuk Lee
   CHI 2022 EA (Demonstration): ACM Conference on Human Factors in Computing Systems
3. **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

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)

PROFESSIONAL EXPERIENCE

Meta Reality Labs, Toronto, Canada — JUN. 2022 – DEC. 2022
Ph.D. Research Intern

Bhaptics — DEC. 2015 – FEB. 2016
Frontend coder
- Web interface development, service page renewal

AWARDS

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 — FAB. 2021
Thesis Title: "Improving Recognition Accuracy of Wrist-Worn Spatiotemporal Tactile Display using Heterogeneous Vibrotactile Stimuli"

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
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) 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

Review
WHC: IEEE World Haptics Conference 2023
INTERACT: IFIP International Conference on Human-Computer Interaction
ETRA: ACM Symposium on Eye Tracking Research & Application

TEACHING

Lecture on SPSS & R practice OCT. 2021
in CS584 Human-Computer Interaction, School of Computing, 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