Eunji Park

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Research Interests

Human computer interaction, Human-centered AI

User Behavior Modeling

Multimodal Interaction and Sensor Fusion

EMPLOYMENT

School of Computer Science and Engineering, Chung-Ang University Assistant Professor (Director of IXLAB)

Seoul, Korea Sep 2023 – Present

EDUCATION

Korea Advanced Institute of Science and Technology (KAIST)

Daejeon, Korea

Ph.D in Computer Science (Advisor: Uichin Lee)

Feb 2019 - Aug 2023

• Thesis: Data-Driven Human Behavior and Performance Modeling using Multimodal Datasets

Korea Advanced Institute of Science and Technology (KAIST)

Daejeon, Korea

M.S. in Culture Technology (Advisor: Byungjoo Lee)

Feb 2017 - Feb 2019

• Thesis: Predicting error rates in pointing regardless of target motion

Korea Advanced Institute of Science and Technology (KAIST)

Daejeon, Korea

B.S. in Material Science and Engineering

Feb 2010 – July 2015

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Honors and Awards

People's Choice Honorable Mention Award (Poster), UIST'25	2025
Recognition for Outstanding Reveiw, CHI'24	2024
NAVER PhD Fellowship Award, NAVER (5M KRW)	2021
Research Grant for Ph.D. Candidates, National Research Foundation of Korea (40M KRW)	2021
Honorable Mention Award, CHI'21	2021
Honorable Mention Award, CHI'20	2020
Kimyounghan Global Leader Scholarship (4M KRW)	2019
Wonkwangyeon Hall Exibition Competition - Media art 'Water lily', Grand Prize	2017

Teaching Awards

- Recognition for Outstanding Teaching, School of CSE, Chung-Ang University (Spring 2025)
- Recognition for Outstanding Teaching, School of CSE, Chung-Ang University (Spring, Fall 2024)
- Outstanding TA Award (CS592 Data Structure), School of Computing, KAIST (2023)
- Outstanding TA Award (CS592 Sensor Data Science), School of Computing, KAIST (2022)
- Outstanding TA Award (CS206 Data Structure), School of Computing, KAIST (2022)

EXPERIENCE

Graduate Research Assistant

Feb 2021 - Aug 2023

Interactive Computing Lab, KAIST

Daejeon, Korea

- Modeling Mental Efforts for Emotion Regulation in Customer Service Call Contexts (IMWUT'24)
- Human Digital Twin for Emotion Workers
- Modeling Tracking Coverage of Physical Activity using Wearables and Smartphones Data
- Modeling User Performance and Behavior Using Machinery Data from Automated Manufacturing System (CHI'23)

Graduate Research Assistant

Feb 2017 – Feb 2021

Interactive Media Lab, KAIST

Daejeon, Korea

• Secrets of Gosu: Understanding Physical Combat Skills of Professional Players in First-Person Shooters (CHI'21)

- NYXL-IML Collaboration Project: Measuring NYXL Player's Physical and Cognitive Performance
- An Intermittent Click Planning Model (CHI'20)
- Button++: Designing Risk-aware Smart Buttons (CHI'18 Late Breaking Work)
- A Study on the Effect of Inter Key Spacing on Typing Performance (HCI Korea'18)
- Moving Target Selection: A Cue Integration Model (CHI'18)

R&D Researcher

July 2015 – Feb 2017

SK Hynix

Icheon, Korea

• Participated in process integration and performance improvement of DRAM

PUBLICATIONS

Conference & Journal Papers

- Kyoungwon Cha*, Dongjin Park*, Yejin Choi, **Eunji Park**+, and Joon-Woo Lee+. "Privacy-Preserving Real-Time Emotion Recognition using Homomorphic Encryption". *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies. 2025.* (IMWUT'25)
- Joonyoung Park*, **Eunji Park***, Duri Lee, Soowon Kang, Takyeon Lee, Hwajung Hong, Sung-Ju Lee, Heepyung Kim, Yu Rang Park, and Uichin Lee. "Human Digital Twins for Pervasive Healthcare: A Scoping Review". *Health Informatics Journal.* 2025.
- Insu Kim, Suhyeon Shin, Junseob Kim, Jaemin Choi, Junhyub Lee, Sangeun Oh, **Eunji Park**, and Hyosu Kim. "MagPie: Extending a Smartphone's Interaction Space via a Customizable Magnetic Back-of-Device Input Accessory". Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems. 2025. (CHI'25)
- Eunji Park, Duri Lee, Yunjo Han, James Diefendorff, and Uichin Lee. "Hide-and-seek: Detecting Workers' Emotional Workload in Emotional Labor Contexts Using Multimodal Sensing". Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies. 2024. (IMWUT'24)
- Eunji Park, Yugyeong Jung, Inyeop Kim, and Uichin Lee. "Charlie and the Semi-Automated Factory: Data-Driven Operator Behavior and Performance Modeling for Human-Machine Collaborative Systems". Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems. 2023. (CHI'23)
- Eunji Park, Sangyoon Lee, Auejin Ham, Minyeop Choi, Sunjun Kim, and Byungjoo Lee. "Secrets of Gosu: Understanding Physical Combat Skills of Professional Players in First-Person Shooters". In Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems. 2021. (CHI'21)

 Best Paper Honorable Mention Award (top 5%)
- Eunji Park, and Byungjoo Lee. "An Intermittent Click Planning Model.". In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems. 2020. (CHI'20)

 Best Paper Honorable Mention Award (top 5%)
- Byungjoo Lee, Sunjun Kim, Antti Oulasvirta, Jong-In Lee, and **Eunji Park.** "Moving Target Selection: A Cue Integration Model". In Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems. 2018. (CHI'18)

Other publications

- Hyunwoo Bae, Taegyun Kwon, and Eunji Park. "An Audio-Visual Framework for Transcription and Fingering
 Optimization in Bass Guitar Performance". In Adjunct Proceedings of the 37th Annual ACM Symposium on User
 Interface Software and Technology. 2025 (UIST'25 Poster)
- Yongchan Son, and **Eunji Park**. "Voice to Victory: Modeling In-Game Voice Communication for Team Coordination in MOBA Games". In Adjunct Proceedings of the 37th Annual ACM Symposium on User Interface Software and Technology. 2025 (UIST'25 Poster)
- Yejin Choi, Dowha Kim, Youngeun Jun, Hyosu Kim, and **Eunji Park**. "Gross!: Personalized Video Content Moderation Using Generative Image Overlays for Aversive Videos". In Adjunct Proceedings of the 37th Annual ACM Symposium on User Interface Software and Technology. 2025 (UIST'25 Poster)

- Been An, Hojoon Lee, and **Eunji Park**. "LibPad: Analyzing the Impact of OS-Specific Transfer Functions on Touchpad Pointing Performance". In Adjunct Proceedings of the 37th Annual ACM Symposium on User Interface Software and Technology. 2025 (UIST'25 Poster)
- Seongmin Choi, Hohyun Song, Yeonghwan Shin, Kyusung Lee, and **Eunji Park**. "Minwon 99: Malicious Civil Complaint Filtering System Using LLM-Based Text Emotion Moderation". In Proceedings of the 2025 HCI Korea
- Hyunwoo Bae, Taekyun Kwon, and Eunji Park. "A Survey on AI-based Piano Fingering Estimation and Optimization: Focusing on Data Collection and Modeling Method". The Korean Institute of Communications and Information Sciences. (KICS'24)
- Yejin Jang, Yejin Choi, and **Eunji Park**. "Emotion Recognition Based on Facial and Multimodal Data: A Survey". The Korean Institute of Communications and Information Sciences. (KICS'24)
- Dohwa Kim, Yejin Jang, and **Eunji Park**. "RODET: Estimating Gaze Position on Mobile Device using Real-time On-device Eye-tracking Model". The Korean Institute of Communications and Information Sciences. (KICS'24)
- Sangjun Park, **Eunji Park**, Paul H Lee, and Uichin Lee. "Measuring Device-Specific Physical Activity Trackability in Multi-Device Environments". 2023 IEEE International Conference on Big Data and Smart Computing. (BigComp'23)
- Eunji Park, Hyunju Kim and Byungjoo Lee. "Button++: Designing Risk-aware Smart Buttons". In Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems. 2018. (CHI'18 Late Breaking Work)
- Hyunju Kim, **Eunji Park** and Byungjoo Lee. "A Study on the Effect of Inter Key Spacing on Typing Performance" In Proceedings of the 2018 HCI Korea. 2018.

INVITED TALKS

The Mark Control of the Control of t	D 2024
The Korean Institute of Information Scientists and Engineers (KIISE) - KSC2024	Dec 2024
The Korean Institute of Communications and Information Sciences (KICS) - Fall Conference 2024	Nov 2024
ETRI	May 2024
HSN Conference	$\mathrm{Jan}\ 2024$
University of Seoul HCI Seminar	Nov 2023
The Korean Institute of Broadcast and Media Engineers Seminar	Nov 2023
UNIST CSE333 (Introduction to Human-Computer Interaction) Seminar	$\mathrm{Jun}\ 2023$
HCI Korea Workshop (Mental Healthcare Based on Human Digital Twin)	Feb 2023
UNIST CSE333 (Introduction to Human-Computer Interaction) Seminar	May 2022
EIRIC (Electronic & Information Research Information Center) Seminar	$\mathrm{Sep}\ 2021$

SERVICES

Organizing

- UbiComp/ISWC 2025 Posters and Demos Tracks Committee member, 2025
- SIGCHI Korea Local Chapter Member, 2025
- 2019 SIGCHI Korea Local Chapter Workshop Local Co-Chair, 2019

Reviewing

- CHI: '26, '25, '24, '23, '19
- IMWUT: '25, '24
- UIST: '25
- UbiComp/ISWC 2025 Posters and Demos: '25
- TEI Work In Progress: '21
- CHI Late Breaking Work: '25, '21, '20
- CHI PLAY Work In Progress: '20, '19
- CSCW Poster: '20

Student Voulunteer

• Ubicomp'21

TEACHING EXPERIENCE

Human Interface Media (School of CSE, Chung-Ang University) Fall '24, '25 IoT Healthcare (School of CSE, Chung-Ang University) Spring '25 Creative Design for Software (School of CSE, Chung-Ang University) Principles of Programming Language (School of CSE, Chung-Ang University) Software Project (School of CSE, Chung-Ang University) Spring '24, '25 Software Project (School of CSE, Chung-Ang University) Spring '24

Fall '23

Object-Oriented Programming (School of CSE, Chung-Ang University)

Teaching Assistant

Data Structure (KAIST CS206)	2022
Sensor Data Science (KAIST CS592)	2022
Data Structure (KAIST CS206)	2021
HCI Theory & practice (KAIST KSE531)	2021
Making Things (KAIST CTP404)	2020
Introduction to Data Analytics Using R (KAIST CS564)	2019
Human-Computer Interaction (KAIST GCT741)	2017