

Minjung Park

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RESEARCH INTERESTS

Human-AI Interaction, Human-Centered Design, Human-Centered AI, Design Research

EDUCATION

Carnegie Mellon University

Ph.D. in Human-Computer Interaction, School of Computer Science

Advisor: John Zimmerman, Jodi Forlizzi

Aug. 2023 - Jun. 2029(expected)

Pittsburgh, USA

Korea Advanced Institute of Science and Technology (KAIST)

M.S. in Industrial Design | Advisor: Hyeon-Jeong Suk

Hyeon-Jeong Suk(Chair), Youn-Kyung Lim, Sangsu Lee

Thesis title : *Designing Facial Expression Guideline for Avatar-Mediated Communication*

Sep. 2021 - Jun. 2023

Daejeon, Korea

Korea Advanced Institute of Science and Technology (KAIST)

B.S. in Industrial Design | Advisor: Youn-Kyung Lim

early graduation

Mar. 2018 - Aug. 2021

Daejeon, Korea

PUBLICATIONS

Conference & Journal Papers

- [c.2] **Minjung Park**, Jodi Forlizzi, and John Zimmerman. **Exploring the Innovation Opportunities for Pre-trained Models** In *ACM CHI Conference on Human Factors in Computing Systems, CHI'25*(in review).
- [c.1] Keunwoo Kim, **Minjung Park**, and Youn-Kyung Lim. **Guiding Preferred Driving Style Using Voice in Autonomous Vehicles: An On-Road Wizard-of-OZ Study** In *ACM SIGCHI Conference on Designing Interactive Systems, DIS '21*.
- [j.3] **Minjung Park** and Hyeon-Jeong Suk. **The characteristics of facial emotions expressed in Memojis.** In *Computers in Human Behavior Report (companion journal to Computer in Human Behavior, IF=8.3)*.
- [j.2] **Minjung Park**, Soyeong Min, Taesoo Kim, and Hyeon-Jeong Suk. **Investigating the Relationship between Vehicle Front-Images and Voice-Assistants.** In *Korean Society for Emotion and Sensibility*.
- [j.1] Taesu Kim, Gyunpyo Lee, **Minjung Park**, Homg min Lee, Ji-Woo Park, and Hyeon-Jeong Suk. **User Responses to Dynamic Light in Automobiles with EEG and Self-Assessment** *IEEE Access*

Posters & Workshop Papers

- [p.3] **Minjung Park** and Abena Boadi-Agyemang. **Designing Interactive Agents to Support Emotion Regulation in the Workplace through Guided Art-Making** In *the ACM/IEEE International Conference on Human-Robot Interaction 2024 (HRI'24)*
- [p.2] **Minjung Park** and Hyeon-Jeong Suk. **New Mobile Adaptation System for Better Avatar-Mediated Communication: Facial Expression in Memoji.** In *the ACM international Conference on Mobile Human-Computer Interaction 2022 (MobileHCI'22)*.
- [p.1] Jaehong Kim, Chaeyoon Jeong, Mooyeol Oh, **Minjung Park**, Meeyoung Cha, and Wonjae Lee. **Emotions that Make Online Petitions Successful: A contrasting View of Private Signing and Public Sharing.** In *international Conference on Computational Social Science 2022 (IC2S2'22)*.

[w.1] **Minjung Park** and Hyeon-Jeong Suk. **Emotional Expression in Memoji.** . In *CHI 2022 Workshop (Future of Emotion in HCI)*.

PATENTS

Unmanned Aerial Vehicle	<i>Korean patent #1020150114725</i>
Water Duster Cleaner with Water Supply Control Capabilities	<i>Korean patent #1020150116542</i>
Clean Tool Using Static Electricity	<i>Korean patent #1020150116965</i>
Cleaning Goods for Disinfection	<i>Korean patent #1020200027776</i>

EXPERIENCE

Carnegie Mellon University , Advised by John Zimmerman, Jodi Forlizzi <i>Research Assistant</i>	Pittsburgh, PA <i>Sep. 2023 - Present</i>
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- **How can we innovate with LLMs?**
Explore how can innovators design and ideate useful LLM products and services. Assist HCI practitioners in better working with LLM by envisioning its potential and broadening the opportunity space.
- **Human-AI Research to Increase Adherence to Wakeup and Breathe in ICU**
Support the clinical team for better collaboration and cooperation with AI-supported decision making in the context of Spontaneous Awakening Trials (SAT) and Spontaneous Breathing Trials (SBT), and develop a corresponding SAT/SBT dashboard.

KAIST Colorlab , Advised by Hyeon-Jeong Suk <i>Research Assistant & Funded Project Manager (Hyundai Motors)</i>	Daejeon, Korea <i>Sep. 2021 - May. 2023</i>
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- **Emotion-enhanced Facial Expressions using Memojis.**
Utilizing Participatory Design(PD) method, explored the problems of the existing status quo and designed a guide for avatars' facial expressions in order to support reliable and accurate online communication.
[p.2][w.1] Conducted the 5-Likert questionnaire to explore avatars' emotional conveyance level and confirmed the tendency and impact of one's nationality on the seven emotions.
[j.3] Performed a human assessment and an AI-driven estimation to establish the baseline levels of seven basic emotions conveyed by Memojis.
- **Ambient lights in automobiles**
[j.1] Served as Project Manager of a collaborative project with Hyundai Motors, provided surveys and VR(Unity+VIVE) workshops to improve the existing ambient lights in vehicles, performed digital ethnography, and conducted in-depth interviews with truckers.

KAIST Creative Interaction Design Lab , Advised by Youn-Kyung Lim <i>Undergraduate Researcher</i>	Daejeon, Korea <i>Jul. 2020 - Jul. 2021</i>
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[c.1] Explored user experiences with teaching guiding styles to the Autonomous Vehicle agents to reflect the users' driving-style preferences with driving study on real roads using a Wizard-of-Oz design strategy.

CJ Livecity <i>UX designer</i>	Seoul, Korea <i>Nov. 2020 - Dec. 2020</i>
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Designed user scenarios for future attraction and was hired as an official UX designer.

KAIST Colorlab , Advised by Hyeon-Jeong Suk <i>Undergraduate Researcher</i>	Daejeon, Korea <i>Jul. 2019 - Sep. 2019</i>
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[j.2] Conducted the survey, matching Voice Agent and Front car image, to explore the most aligned car front design with the Voice Agents with PCA(Principal Component Analysis).

KAIST Codedesign Interaction Design Research Lab, Advised by Tek-Jin Nam
Undergraduate Researcher

Daejeon, Korea
Mar. 2018 - Dec. 2018

Designed a 3D-printed tumbler, changed its pattern using augmented prototyping, and explored the viability and reliability of the augmented prototyping method.

HONORS AND AWARDS

IF Award in communication design

May. 2022

Stock information app service which visualizes past stock charts through sentiment analysis.
(selected among 11000+ submissions)

Most Contributed-to-Creativity Student

2022

Honored with the title of most Creativity Student in **Tokyo Tech's** 2022 online summer school.

Leadership Mileage Certificate, KAIST

2020

Honor for top 3% among 3,600+ students with top achievements in leadership activities including volunteering and campus activities.

Scholarship of Mintsage

Nov. 2019

Received a \$200 Industrial Design scholarship from Mintsage for outstanding design accomplishments.

Intel ISEF

2017

Selected as a finalist among more than 1,800 outstanding students and as a representative of Korea in material science.

Talent Award of Korea

2016

A total of 100 people are selected as Korea's next leaders.

(Award of Deputy Prime Minister and Minister of Education with \$3000 scholarship)

SERVICES

Reviewing

ACM/SIGCHI Conference on Designing Interactive Systems (DIS) 2024

ACM/SIGCHI Conference on Human Robot Interaction (HRI) 2024

ACM/SIGCHI Conference on Human Factors in Computing Systems (CHI) 2023, 2024

Student Volunteer

MobileHCI 2022 : Proceed to the in-person conference in more than 20 hours and selected as Gifted Artist (SV's t-shirt designer)

SKILLS

Language

Korean(Native), English(Full professional proficiency), Chinese(Beginner)

Programming and Development

Web : HTML, CSS

Product Development : Processing, Arduino, C++, C

Data Processing : Python(numpy, pandas, plotly), R, SPSS

Data visualization : R(ggplot)

Design and Media Creation

Adobe : Photoshop, Illustrator, After Effects, Lightroom, XD

UI tool : Figma, Miro, Sketch, Protopie

Modeling tool : Keyshot, Fusion 360, Unity, Blender

Word editing : Latex

MENTORING

CMU Undergrad AI mentoring program (committee)

July. 2024 - current

CMU Undergrad AI mentoring program (mentor)

Mentoring Carnegie Mellon University, School of Computer Science undergraduate students relate to AI research. The students below were mentoring students.

- Dian Zhu *Sep. 2023 - May. 2024*
- Chen Fang *Sep. 2023 - Dec. 2023*
- Katie Weng *Sep. 2023 - Dec. 2023*

EXTRACURRICULAR ACTIVITIES

SCS PhD Applicants Mentor

2024, 2025

Korean Class Volunteering Work

Sep. 2023 - current

A teacher of Korean Class at Carnegie Library

KAIST Student Ambassador, KAINURI

Mar. 2018 - Feb. 2020

A member of Social Media Team

KAIST Vision Magazine Editor

Mar. 2018 - Feb. 2020

THE-KAIST Innovation & Impact Summit

Mar. 2019

Protocol Manager

KAIST Undergraduate Tennis Club

Mar. 2018 - Dec. 2018

A member of executives in 2018.

KAIST Freshmen Student Volunteer

2018