

Minjung Park

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RESEARCH INTERESTS

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

EDUCATION

Carnegie Mellon University Aug. 2023 - Jun. 2028(expected)
Ph.D. in Human-Computer Interaction Pittsburgh, USA

Advisor: John Zimmerman, Jodi Forlizzi

Korea Advanced Institute of Science and Technology (KAIST) Sep. 2021 - Jun. 2023
M.S. in Industrial Design Daejeon, Korea

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

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

Korea Advanced Institute of Science and Technology (KAIST) Mar. 2018 - Aug. 2021
B.S. in Industrial Design | Advisor: Youn-Kyung Lim Daejeon, Korea
early graduation

PUBLICATIONS

Conference & Journal Papers

- [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 the Proceedings of the ACM Designing Interactive Systems Conference 2021(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(under review)*.
- [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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- **AI in the ICU**

Designing human-AI interactions in the context of Spontaneous Awakening Trials(SAT)/ 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 Voice Agent-Front car image matching surveys to explore the most aligned car front design with Voice Agents and did the PCA(Principal Component Analysis).

KAIST Codesign Interaction Design Research Lab , Advised by Tek-Jin Nam <i>Undergraduate Researcher</i>	Daejeon, Korea <i>Mar. 2018 - Dec. 2018</i>
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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	<i>May. 2022</i>
Stock information app service which visualizes past stock charts through sentiment analysis. (selected among 11000+ submissions)	
Most Contributed-to-Creativity Student	<i>2022</i>
Honored with the title of most Creativity Student in Tokyo Tech's 2022 online summer school.	
Leadership Mileage Certificate, KAIST	<i>2020</i>
Honor for top 3% among 3,600+ students with top achievements in leadership activities including volunteering and campus activities.	
Scholarship of Mintsage	<i>Nov. 2019</i>
Received a \$200 Industrial Design scholarship from Mintsage for outstanding design accomplishments.	
Intel ISEF	<i>2017</i>
Selected as a finalist among more than 1,800 outstanding students and as a representative of Korea in material science.	
Talent Award of Korea	<i>2016</i>
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 Human Factors in Computing Systems (CHI) 2023

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

Sep. 2023 - current

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

- Dian Zhu
- Chen Fang
- Katie Weng

EXTRACURRICULAR ACTIVITIES

Korean Class Volunteering Work A teacher of Korean Class at Carnegie Library	<i>Sep. 2023 - current</i>
KAIST Student Ambassador, KAINURI A member of Social Media Team	<i>Mar. 2018 - Feb. 2020</i>
KAIST Vision Magazine Editor	<i>Mar. 2018 - Feb. 2020</i>
THE-KAIST Innovation & Impact Summit Protocol Manager	<i>Mar. 2019</i>
KAIST Undergraduate Tennis Club A member of executives in 2018.	<i>Mar. 2018 - Dec. 2018</i>
KAIST Freshmen Student Volunteer	<i>2018</i>