

# Minjung Park

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## RESEARCH INTERESTS

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Human-AI Interaction, Human-Centered AI, HCI innovation, AI in Healthcare

## EDUCATION

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### Carnegie Mellon University

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

Advisor: John Zimmerman, Jodi Forlizzi

Aug. 2023 - Present

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

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### Conference & Journal Papers

- [c.3] **Minjung Park**, Jodi Forlizzi, and John Zimmerman. **Exploring the Innovation Opportunities for Pre-trained Models.** In *ACM SIGCHI Conference on Designing Interactive Systems, DIS '25*.
- [c.2] Ji-Youn Jung, Devansh Saxena, **Minjung Park**, Jini Kim, Jodi Forlizzi, Kenneth Holstein and John Zimmerman. **Making the Right Thing: Bridging HCI and RAI in Early-Stage AI Concept Selection.** In *ACM SIGCHI Conference on Designing Interactive Systems, DIS '25*.
- [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

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

## EXPERIENCE

<b>Carnegie Mellon University</b> , Advised by John Zimmerman, Jodi Forlizzi <i>Research Assistant</i>	Pittsburgh, PA <i>Sep. 2023 - Present</i>
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- **Creating value with LLM**  
[c.3][c.2] Exploring innovation opportunities for pre-trained models by analyzing when, where, how, and for whom current LLM (Generative AI)-infused applications are designed. Supporting design innovators in identifying safe starting place for creating LLM-infused products and services by providing LLM capabilities and interaction design pattern.
- **AI innovation in Healthcare**
  - **Exploring opportunities of auto-documentation tool in ICU**  
Leveraging Generative AI, such as few-shot learning, in clinicians' documentation workflows to explore how it can support auto-documentation systems in rapidly adapting to new clinical practices as standards of care continually improve.
  - **Human-AI Research to Increase Adherence to Wakeup and Breathe in ICU**  
Support the clinical team in enhancing coordinative care by exploring opportunities for computing systems to assist with clinicians' sequential and coordinated workflows, such as Spontaneous Awakening Trials (SAT) and Spontaneous Breathing Trials (SBT).

<b>KAIST Colorlab</b> , Advised by Hyeon-Jeong Suk <i>Research Assistant &amp; 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

Daejeon, Korea

*Undergraduate Researcher*

*Jul. 2020 - Jul. 2021*

[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**

Seoul, Korea

*UX designer*

*Nov. 2020 - Dec. 2020*

Designed user scenarios for future attraction and was hired as an official UX designer.

**KAIST Colorlab**, Advised by Hyeon-Jeong Suk

Daejeon, Korea

*Undergraduate Researcher*

*Jul. 2019 - Sep. 2019*

[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 Codesign Interaction Design Research Lab**, Advised by Tek-Jin Nam

Daejeon, Korea

*Undergraduate Researcher*

*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

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**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)

## INVITED TALK

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**Mapping the Innovation Space : Identifying Opportunities for LLM-Powered Systems**

*Aug. 2025*

@ UIUC SALT Lab, lead by Yun Huang

**Mapping the Innovation Space : Identifying Opportunities for LLM-Powered Systems**

*Jul. 2025*

@ Northeastern CHAI Lab, lead by Smit Desai

## SERVICES

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### Reviewing

ACM/SIGCHI Conference on Designing Interactive Systems (DIS) 2025 2024  
ACM/SIGCHI Conference on Human Factors in Computing Systems (CHI) 2023, 2024  
Computers in Human Behavior Journal  
ACM/SIGCHI Conference on Human Robot Interaction (HRI) 2024

### Student Volunteer

**DIS 2025** : PC meeting student volunteer  
**MobileHCI 2022** : SV's t-shirt designer  
Proceed to the in-person conference in more than 20 hours and selected as Gifted Artist

## SKILLS

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### 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

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**CMU Undergrad AI mentoring program (committee)** *July. 2024 - Present*

**SCS HCII Independent Studies (mentor)** *Sep. 2024 - current*

- Tingyu Su | *prev CMU MIIPs, now @ Youlify* *Sep. 2024 - Dec. 2024*
- Katherine Niuu | *CMU MHCI* *Sep. 2024 - Dec. 2024*
- Ashveen Banga | *CMU CS* *Sep. 2024 - Dec. 2024*

**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

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<b>SCS PhD Applicants Mentor</b>	2024, 2025
<b>Korean Class Volunteering Work</b> A teacher of Korean Class at Carnegie Library	Sep. 2023 - Present
<b>KAIST Student Ambassador, KAINURI</b> A member of Social Media Team	Mar. 2018 - Feb. 2020
<b>KAIST Vision Magazine Editor</b>	Mar. 2018 - Feb. 2020
<b>THE-KAIST Innovation &amp; Impact Summit</b> Protocol Manager	Mar. 2019
<b>KAIST Undergraduate Tennis Club</b> A member of executives in 2018.	Mar. 2018 - Dec. 2018
<b>KAIST Freshmen Student Volunteer</b>	2018