

# Minjung Park

✉ minjungpark@cmu.edu    🏠 cs.cmu.edu/ mpark2

## RESEARCH INTERESTS

---

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

## EDUCATION

---

**Carnegie Mellon University** Aug. 2023 - Jun. 2029 (expected)  
Ph.D. in Human-Computer Interaction, School of Computer Science Pittsburgh, USA  
Advisor: John Zimmerman, Jodi Forlizzi

**Korea Advanced Institute of Science and Technology (KAIST)** Sep. 2021 - Jun. 2023  
M.S. in Industrial Design | Advisor: Hyeon-Jeong Suk 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 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

---

**Carnegie Mellon University**, Advised by John Zimmerman, Jodi Forlizzi  
*Research Assistant* Pittsburgh, PA  
*Sep. 2023 - Present*

- **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  
*Research Assistant & Funded Project Manager (Hyundai Motors)* Daejeon, Korea  
*Sep. 2021 - May. 2023*

- **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  
*Undergraduate Researcher* Daejeon, Korea  
*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**  
*UX designer* Seoul, Korea  
*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  
*Undergraduate Researcher* Daejeon, Korea  
*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  
*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**

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

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

## EXTRACURRICULAR ACTIVITIES

---

### **Korean Class Volunteering Work**

A teacher of Korean Class at Carnegie Library

*Sep. 2023 - current*

### **KAIST Student Ambassador, KAINURI**

A member of Social Media Team

*Mar. 2018 - Feb. 2020*

### **KAIST Vision Magazine Editor**

*Mar. 2018 - Feb. 2020*

### **THE-KAIST Innovation & Impact Summit**

Protocol Manager

*Mar. 2019*

### **KAIST Undergraduate Tennis Club**

A member of executives in 2018.

*Mar. 2018 - Dec. 2018*

### **KAIST Freshmen Student Volunteer**

*2018*