### Research Interest

My research goal is to help people live better lives by supporting human cognitive development with science and technology, with a strong emphasis on a human–centered design approach. In particular, I have explored how digital interactions can enable people to become aware of and manage things that are difficult to perceive, such as emotions or unconscious behaviors.

## Educations

Aug 2022 - Aug 2024

Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea

M.S. in Industrial Design Advisor: Prof.Hwajung Hong

Mar 2013 - Feb 2019

Seoul National University (SNU), Seoul, South Korea

B.F.A. in Painting B.F.A. in Media Art Graduated with honors

### **Publications**

Thesis

Exploring design opportunities of the surrealistic virtual environment for mindfulness: VR interventions to mitigate emotional eating

Sooyeon Ahn (Advisor: Hwajung Hong)

MS Thesis, Korea Advanced Institute of Science and Technology 2024

Journal & Conference Paper

MindTerior: A Mental Healthcare Game with Metaphoric Gamespace and Effective Activities for Mitigating Mild Emotional Difficulties

Ain Lee, Juhyun Lee, <u>Sooyeon Ahn</u>, and Youngik Lee \*<u>The authors contributed equally to this work.</u>
CHI 2023: ACM Conference on Human Factors in Computing Systems

#### Designing a Personalized Stress Management System for Call Center Workers

Kwangyoung Lee, Hyunseung Lim, <u>Sooyeon Ahn</u>, Taewan Kim, Hwajung Hong BigComp 2023: IEEE International Conference on Big Data and Smart Computing

# **Projects**

#### 2024 **Curi**

*Curi* is a text-based online mentoring platform aiming to solve the digital divide accelerated by network and technical issues. We proposed a text-based online mentoring platform with AI support based on user research results about existing video and voice-based mentoring services.

Sooyeon Ahn, Chaebeen Kwon, Yeji Shim, Hyobin Cho

Role: User research, Service plan, and design, Team lead

# 2024 **EE-Scape**

Recorded video of EE-Scape

*EE-Scape* is a VR mindfulness application that alleviates impulsive eating triggered by emotional reasons. Our preliminary studies indicated that most emotional eaters reflect some meanings to the food(e.g., a friend comforting me). To deal with these emotional bonds, EE-SScape provides a novel virtual food experience that allows users to perceive the food differently and reflect on their emotional eating habits.

Sooyeon Ahn, Hwajung Hong, Eunmi Kim

Role: Research, Service plan and design(Lead), VR application development, First author

## 2022 - **MindBattery**

In this study, we developed MindBattery, a smartphone application that uses a battery metaphor to help call center workers recognize their emotional energy depletion, and provides a set of microbreaks for emotional recovery.

Ain Lee, Sooyeon Ahn, and Jongok Hong

Role: Research, Service plan and design, UX/UI Design, Interaction Design, Co-author

### 2022 - MindTerior Publication CHI 2023

2023 *MindTerior* is a mental health care game for people with mild emotional difficulties. It analyzes each player's emotional state and shows the results as visual elements in the game space. It also suggests a gamified evidence—based mental health care activity that allows players to cope with their emotional problems.

Ain Lee, Juhyun Lee, <u>Sooyeon Ahn</u>, and Youngik Lee \*All members contributed equally to this work.

Role: Research, Service plan and design, Sound Design, Development support(Unity), Co-first author

2021 - OWN Recorded video of OWN

OWN is a 3D virtual space that elaborately visualizes the abstract and invisible inner world. It was dedicatedly tailor—designed for just one person(OWNer) through in—depth psychological analysis. It comprises therapeutic elements based on color psychology, environmental psychology, and art therapy to help calm the mind.

Sooyeon Ahn. Heeyoung Beak, Gill Son, and Dongbum Kim

Role: Research, Project management(lead), 3D virtual world design(Unreal Engine)

### 2021 For the STARved

Link to For the STARved, Red Dot 2022

For the STARved is an astrophotography exhibition held in an online 3D virtual space. It allows people starved of stars due to the pandemic to freely explore beautiful and fantastic galleries and watch astrophotographs taken by club members.

Sooyeon Ahn. Youngjae Kim, Doeun Kim, Seojin Park, Seungyun Oh, Minha Kang, and Wootae Kim Role: Project Management, Design team lead, UX/UI Design, 3D Design, Sound Design

#### 2020 Mind-room

Link to Mind-room, Red Dot 2022

*Mind-room* is an online test designed to increase people's awareness of their emotional state. It analyzes each user's emotional state based on how they react to various situations during a virtual journey, then suggests an emotionally calming room designed based on various theories such as color psychology and art therapy.

Sooyeon Ahn, Youngjae Kim, Minha Kang

Role: Project Management, Research, UX/UI Design, Illustration, Sound Design

## Certificate

Nov 2024 Boost Course (Generative AI 2024) Coaching Study, Naver Connect Foundation

Oct 2024 The user research and design for the social impact UX project, COGITO

Aug 2024 Boost Course \( Data Science 2024 \) Coaching Study, Naver Connect Foundation

Jun 2023 CHI 2023 Student Game Competition Finalist Certificate, ACM CHI Conference

Dec 2021 Digital Three-Dimensional Creation Workshop for Lecturer, Sketchsoft Inc.

# **Teaching Experience**

#### Teaching Assistant, KAIST, Daejeon, South Korea

Mar 2024 – Jun 2024 ID218 Photo Techniques Sep 2023 – Dec 2023 ID221 Information Design

Sep 2022 - Dec 2022 ID221 Information Design \*Awarded for Outstanding TA Award

#### Academy Instructor, GAUDI Design & Art Institute, Gwacheon, South Korea

Jan 2019 – August 2022 – Teaching Painting and Art Theories

- Planning the annual exhibitions

# Scholarships & Awards

2024	Outstanding Contribution Award, COGITO (Funded by the MIT Sandbox Innovation Fund)				
2023	Outstanding TA Award, KAIST Center for Excellence in Learning and Teaching				
2022	Red Dot Award in Brands & Communication Design: Digital Solution, Red Dot Design Award Red Dot Award in Brands & Communication Design: Websites, Red Dot Design Award				
2019	Cum Laude: Graduated with honors, Seoul National University				
2018	<b>Grand Prize</b> in CI design competition for SNU tech-startup plaza, College of Engineering at Seoul National University				
2017	SNU Development Fund Scholarship (Merit-Based), Seoul National University				
2016	Eminence scholarship (Merit-Based: excellence), Seoul National University				
2015	<b>SNU Development Fund Scholarship</b> (Merit-Based), Seoul National University <b>Eminence scholarship</b> (Merit-Based: excellence), Seoul National University				
2014	Eminence scholarship (Merit-Based: excellence), Seoul National University Merit-based scholarship, Seoul National University				
2013	<b>SNU Development Fund Scholarship</b> (Merit–Based), Seoul National University <b>Merit Based Scholarship</b> , Seoul National University				
2011	Silver Prize, la Francophonie Photo contest				

# Experience

Oct 2024 – Oct 2024 COGITO, New York, USA

Freelancer UX/UI Designer (Remote)

- Conducted user research and UX/UI Design

- Design team leader

Aug 2022 – Aug 2024 Data Interaction Design(DxD) Lab, Daejeon, South Korea

Research Assistant

- Worked as a researcher and designer in the research project: Development of human digital twin technology for predicting and managing mental health problems of emotional labor

Advisor: Hwajung Hong

Jun 2020 – Aug 2022 **Downleit**, Seoul, South Korea

Freelancer Graphic Designer

- Designed several 3D motion posters for art exhibitions
- Developed an AR application for an art exhibition
- Designed a website for an art exhibition

May 2019 – Aug 2019 Conalog, Seoul, South Korea

Part-Time Designer

- Designed a website for Conalog, a company manufacturing small appliances based on energy-harvesting technology.
- Branding, UI/UX design, Graphic Design

Jan 2018 – Apr 2018 Shareus, Seoul, South Korea

Design Intern

- Designed an online lecture platform to lead communication between retired seniors and the younger generation: aimed to mitigate the isolation and depression of the elderly and anxiety of young adults.
- Branding, UX/UI Design, Graphic Design, Video Editing, Motion graphic design

Mar 2015 — Oct 2015 Korea Foundation for Women In Science, Engineering and

Technology(WISET), Seoul, South Korea

Designer at a research project

 Designed a humidity sensor for a research project: Tannic acid coated graphene oxide reinforced poly(vinyl alcohol) nanocomposites with humidity sensing properties

## Selected Exhibitions

- 2024 Crossing Over: Innovation and Boundaries, Ground Seoul, South Korea
- 2023 Over Road, Andong International Convention Center (ADCO), Andong, South Korea Blueprint: Feasible Blue, ONDREAM SOCIETY, Seoul, South Korea Art Eternal Light, MEUM(Online 3D Exhibition) & Arts Center Seoul, Seoul, South Korea Sensing Anthropocene, KAIST, Daejeon, South Korea CHI 2023 Exhibition, Congress Center Hamburg (CCH), Hamburg, Germany
- 2022 *Inventive Minds and Ideas: Living in the Future*, DDP, Seoul, South Korea
- 2021 Neohyndaism 3rd: Miracle, Geomang Creative Studio (GCS), Seoul, South Korea Video Bites, Interart Channel, Seoul, South Korea For the STARved, Online 3D exhibition

2020	<i>Mind-room</i> , Online exhibition				
	Mirror in Mirror, SOSHO, Seoul, South Korea				
	Fragmentary Memory (Solo Exhibition), OSISUN, Seoul, South Korea				
2018	Running Time Running, Seoul National University, Seoul, South Korea				
2017	Not a Family but Similar, Seoul National University, Seoul, South Korea				
2016	Festival 284: 英雄本色 A Better Tomorrow, Culture Station Seoul 284, Seoul, South Korea SNU 70th Anniversary Exhibition,				
2013	A Meeting of Video and Sound, nest NADA, Seoul, South Korea				
2011	Stories of 14 persons, Gallery In ⟨□, Seoul, South Korea la Francophonie Photo Exhibition, Ambassade France Seoul, Seoul, Korea				

# Skills

Adobe: Photoshop, Lightroom, Illustrator, InDesign, Premiere Pro, After Effects, Audition 3D: Blender, Inventor, SOLIDWORKS, SketchUp pro, Unreal Engine, Unity, 3D printing

UX/UI: Figma, XD

Music: Musescore, Logic Pro X Code: Python, HTML, CSS

Others: Arduino, Drawing, Painting, Printing, Sculpting, Paper making, Ceramic work, Sewing

# Languages

Korean: Native

English: IELTS 7.0 - L 7.5 R 8.0 W 6.5 S 6.0