
RESEARCH INTERESTS

- 1) Human-AI collaboration in data analysis
 - Data analysis of text data, personal informatics in healthcare
- 2) Data-driven visual communication
 - Visual storytelling, self-reflection, creative expression

EDUCATION

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| Cornell University , Ithaca, NY, United States
Ph.D. Student in Information Science
Advisor: Jeff Rzeszotarski | 09/2021 - present |
| Korea Advanced Institute of Science and Technology (KAIST) , Deajeon, Korea
M.S. in Industrial Design (Specialization: Human-Computer Interaction) <ul style="list-style-type: none">• Thesis: <i>Improving Communication in Computational Notebooks Using Interactive Data Comics</i>• Advisor: Andrea Bianchi | 08/2018 - 02/2021 |
| University of Wisconsin-Madison , Madison, WI, United States
Exchange Program in Data Science & Human-Computer Interaction | 01/2020 - 05/2020 |
| Hongik University , Seoul, Korea
B.F.A. in Visual Communication Design (Specialization: UX Research) <ul style="list-style-type: none">• Thesis: <i>Lexia in Wonderland: Korean Education Service for Children with Dyslexia</i> | 03/2013 - 08/2018 |
| California Institute of the Arts , California, United States
Exchange Program in Graphic Design and Animation | 09/2014 - 12/2014 |
| Luxun Academy of Fine Arts , Shenyang, China
Exchange Program in Visual and Communication Art | 03/2016 - 06/2016 |

ONGOING PROJECTS

- 1) Investigate the effect of the different modalities of generative AI on creative visual imagery
- 2) Understanding the needs of PCOS patients to design a self-monitoring tool

PUBLICATIONS

CONFERENCE

The titles of papers currently under review are edited to maintain anonymity in peer review.

Human-AI Collaboration in Iterative Theme Refinement with an LLM-embedded Interactive Visual System

Daye Kang, Frank Han, Jiahe Tian, Muhan Zhang, and Jeff Rzeszotarski. 2024. (UIST' 24). (Under review).

Challenges in Qualitative UX Research in Multi-Stakeholder Collaboration

Daye Kang, and Jeff Rzeszotarski. 2024. (CSCW' 24).

ToonNote: Improving Communication in Computational Notebooks Using Interactive Data Comics

Daye Kang, Tony Ho, Nicolai Marquardt, Bilge Mutlu, and Andrea Bianchi. 2021. In Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems (CHI' 21).

HeyTeddy: Conversational Test-Driven Development for Physical Computing

Yoonji Kim, Youngkyung Choi, Daye Kang, Minkyong Lee, Tek-Jin Nam, and Andrea Bianchi. 2020. Proc. ACM Interact. Mob. Wearable Ubiquitous Technol. 3, 4, Article 139 (December 2019), 21 pages (IMWUT' 19).

Lexia in Wonderland: Korean Education Service for Children with Dyslexia

Daye Kang, Hye-Ryeong Kim, Ji-Hae Lee, Jae Young Yun. 2017. Conference on Korean Society of Design Science (KSDS' 17).

POSTER

Designing Internal Structure of Chocolate and Its Effect on Food Texture

Yujin Lee, Jee Bin Yim, Daye Kang, Hyeon-Beom Yi, and Daniel Saakes. 2019. Conference on Designing Interactive Systems (DIS '19).

Nudge Design to Increase Physical Activities for Hospitalized Children

Daye Kang, Hye-Min Choi, Ka-Hyun Kim, and Younjoon Lee. 2017. Conference on Korean Society of Design Science (KSDS '17).

**RESEARCH
EXPERIENCE**

Cornell University , Ithaca, NY, United States	09/2021 - present
Research Assistant — Advisor: Jeff Rzeszotarski	
Designing and developing human-AI interaction in data analysis to support non-AI experts	
Ringle , Seoul, Korea	02/2021 - 06/2021
UX/UI designer	
Collaborating with Kixlab [Link] to design AI-assisted English language learning interfaces	
Korea Advanced Institute of Science and Technology , Deajeon, Korea	
MAKInteract Lab [Link] Research Assistant — Advisor: Andrea Bianchi	09/2018 - 02/2020
Proposing projects, conducting user studies, participating in industrial projects	
NH KAIST Research Center UX Trend Researcher	06/2020 - 12/2020
Published periodicals on the latest UX trends in digital services	
Hyundai Motors , Co-project Manager — Advisor: Andrea Bianchi	09/2019 - 01/2020
Proposed 'Road Characteristics Recognition Using Acoustic Feedback and Machine Learning for Adaptive Driving'	
Color Lab [Link] , Research Assistant	06/2019 - 08/2019
Developing scenarios for an adaptive display for idling TVs	

Hongik University, Seoul, Korea

Asan Medical Innovation Center, Research Assistant

06/2017 -
11/2017

· Interviewing doctors, nurses, caregivers, and hospitalized children

· Designed a game to promote a sense of belonging among family members

**AWARDS AND
HONORS**

Graduate Working Group fellowship, Media Studies Initiative, Cornell University

2023-
2024

Grant for a regular working group with the topic of Generative AI

Best Master's Thesis Award, Department of Industrial Design, KAIST

2021

NoteToon: Exploring the Effects of Visual Narratives within the Notebook Interface to Improve Communication

Korean Government Scholarship, Korea Ministry of Science and Technology

2018 -
2021

Scholarship for promising master students

Adobe Design Achievement Awards (Semifinalist), Adobe

2017

Social Impact - Web/App/Game Design — Korean education app for Dyslexic children 'Lexia in Wonderland' [[Link](#)]

Dean's Award, Hongik University

Academic Achievement & Research Publication at Korean Society of Design Science

Graduation Project Excellence Award, Visual Communication Design Department

'Lexia in Wonderland: Korean Education Service for Children with Dyslexia'

Excellence Paper Award, Korean Society of Design Science

'Lexia in Wonderland: Korean Education Service for Children with Dyslexia'

Poster Honor Award, Korean Society of Design Science

'Nudge Design to Increase Physical Activities for Hospitalized Children'

Excellence Award, Times Young Creative Awards

2016

2D & 3D animation advertisement for candy brand 'QinQin Hou'

**TEACHING
ASSISTANT**

INFO3300 - Data-Driven Web Applications, Cornell

Fall 2023

Interactive data visualization using D3.js

INFO3450 - Human-Computer Interaction Design, Cornell

Spring 2022

UX/UI design from user research to prototyping

INFO3450 - Human-Computer Interaction Design, Cornell

Fall 2022

UX/UI design from user research to prototyping

ID220 - Interaction Prototyping, KAIST

Fall 2019

Physical computing & Processing (Java) building interactive prototypes

CC500 - Scientific Writing, KAIST Spring 2019
 Scientific writing in English in CHI format using LaTeX (Overleaf)

ID202 - Idea & Expression, KAIST Fall 2018
 Focus on drawing and creating 3D objects using traditional materials

WORK EXPERIENCE

UX/UI design Intern, Ringle 02/2021 - 06/2021
 - Design learning dashboard to track learning progress and to improve motivation
 - Explain AI analysis to users

3D Modelling Intern, Studio Gale 07/2015 - 08/2015
 Designed and created 3D models for the production of the TV animation 'Pororo'

CONFERENCE **CHI 2024**, Honolulu, USA / **CHI 2021**, Yokohama, Japan (Virtual) / **CHI 2019**, Glasgow, UK / **KSDS 2017**, Dae-gu, Korea

SKILLS

Research **Methods:** Qualitative, Quantitative, and Mixed Methods
Data analysis: Python (Numpy, Pandas), R
User research: Affinity Diagram, Focus Group Interview, Ethnography, Participatory Design, Idea Workshop, Journey Map, Wizard of Oz

Prototyping **Software:** React, Javascript, D3.js, Python, FastAPI, HTML, CSS, Git, JupyterLab extension framework, Machine learning
Design: Adobe Creative Tool Kits, Sketch, Figma

Art Graphic design, Typography, 2D/3D Animation, Traditional/Digital illustrations

OTHER INTERESTS Growing plants, fitness, and cooking