

Jae Young Choi

HUMAN-AI INTERACTION · UBIQUITOUS COMPUTING · VISUALIZATION

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Education

KAIST (Korea Advanced Institute of Science and Technology)

M.S. IN INDUSTRIAL DESIGN

- Advisor: Prof. Tak Yeon Lee

Sep. 2024 - PRESENT

Daejeon, South Korea

POSTECH (Pohang University of Science and Technology)

B.S. IN CHEMICAL ENGINEERING (MAJOR) / COMPUTER SCIENCE AND ENGINEERING (MINOR)

- GPA: 3.61/4.3 (Magna Cum Laude)

Mar. 2018 - Aug. 2024

Pohang, South Korea

Gyeonggi Science High School for the Gifted

MAJOR IN PHYSICS / CHEMISTRY

Mar. 2015 - Feb. 2018

Suwon, South Korea

Publications

Gaze2Prompt: Turning Eye-Tracking Data into Visual Prompts for Multimodal LLMs 🏆 Best Poster Award

2025

Jae Young Choi, Seon Gyeom Kim, Jaywoong Jeong, Ryan Rossi, Jihyung Kil, and Tak Yeon Lee

Companion of the 2025 ACM International Joint Conference on Pervasive and Ubiquitous Computing

Grounded Generation of Embellished Bar Chart Ensuring Chart Integrity

2025

Seon Gyeom Kim*, Jae Young Choi*, Phillip Y. Lee, Jaeryung Chung, Ryan Rossi, Jihyung Kil, Eunye Koh, and Tak Yeon Lee (* equal contributions)

2025 IEEE Visualization and Visual Analytics (VIS)

Chart-to-Experience: Benchmarking Multimodal LLMs for Predicting Experiential Impact of Charts 🏆 Best Paper Award 2025

Seon Gyeom Kim, Jae Young Choi, Ryan Rossi, Eunye Koh, and Tak Yeon Lee

2025 IEEE 18th Pacific Visualization Conference (PacificVis)

Experiences

Naiden Inc.

IoT ENGINEER (INTERN)

- Implemented reliable sensor-to-gateway data transmission for manufacturing IoT
- Integrated streaming data into Google Cloud with SQL-based storage/management.

Jul 2023 – Aug 2023

Seoul, South Korea

Seoul Metro

MILITARY SERVICE

- Conducted subway patrol and safety management across assigned stations.

Oct 2020 – Jul 2022

Seoul, South Korea

D-Signer

UI DESIGNER (INTERN)

- Led brand design and mobile/web UI for *Unpalette*, a social media for designers.
- Delivered assets and prototypes using Figma/Photoshop; gained lean startup experience through rapid iterations with stakeholders.

Jun 2019 – Aug 2019

Seoul, South Korea

APGC-Lab (POSTECH Start-up Incubation Center)

CONTENTS CREATOR

- Produced videos for YouTube, conducted founder interviews, and supported on-site event operations.

Feb 2019 – Jul 2019

Pohang, South Korea

Honors, Awards & Grants

Best Poster Award

ACM UbiComp 2025

Oct 2025

National Runner-Up

James Dyson Awards

Sep 2025

Best Paper Award

IEEE PacificVis 2025

Apr 2025

1st Prize Winner (1/20 from Korean top school teams)

2025 BlackOut Hackathon

Jan 2025

Silver Award Winner (Top 4)

45th Cheil Idea Festival (Korea's largest advertising competition)

Jun 2024

Research Scholarship (3 selected nationwide) (~ USD 5,000)

Samsung Display

Feb 2024

1st Prize Winner

ChatGPT & Gen-AI Usecase Contest, POSTECH

Jun 2023

Academic Excellence

POSTECH

Fall 2022, Spring 2023, Fall 2023

Korean Chemistry Olympiad

Korean Chemical Society

Summer 2016, Winter 2015, Summer 2015

Professional Trainings

SK Telecom FLY AI Challengers (AI Bootcamp)

Jun 2024 – Aug 2024

SK TELECOM

- Learned LLM Ops technologies including Azure, Kubernetes, Ollama, and VLM.
- Developed *m.AI Tutor*, an AI-powered math tutoring service for underprivileged middle school students using LLMs and mobile device.

Apple Foundation Program

Apr 2024 – May 2024

APPLE DEVELOPER ACADEMY

- Learned iOS development with SwiftUI and Apple's design thinking methodology, Challenge-Based Learning (CBL).
- Designed and prototyped an iOS app for personalized travel curation.

Google UX Design Certificate

Jul 2021 – Dec 2021

COURSERA

- Completed the foundational coursework in user experience (UX) design.

Gyeongbuk AI Blockchain Startup Incubating Program, POSTECH

Aug 2019

POSTECH

- Proposed a startup idea for an emoticon creation and sharing platform.

Projects

O2Stick

Spring 2025

PRODUCT DESIGN

KAIST

- Designed and prototyped a compact device that reliably generates oxygen in emergency situations.
- Developed a power-free mechanism using the dissolution process of the ubiquitous material *Sodium Percarbonate* to produce oxygen.
- Selected as a National Runner-Up (Top 3) for the *James Dyson Award 2025*, and advanced to the International Round. (also submitted to the iF Award)

Text Per Second

Fall 2024

ARTWORK

KAIST

- A multi-device web performance envisioning a near future where AI agents engage in endless conversation, generating an uncontrollable surge of dialogue and automation beyond human oversight. (Inspired by Eric Schmidt's reflections on autonomous AI and Goethe's *The Sorcerer's Apprentice*)
- Implemented interactive communication across mobile devices using *Socket.io* and *Next.js*.

Keywords in CHI

Fall 2024

INTERACTIVE DATA STORYTELLING

KAIST

- An interactive web visualization narrating the evolution of research topics in CHI papers up to 2024.
- Conducted data collection, text embedding, dimensionality reduction, and interactive web visualization.

Inverse Design of Aesthetic Radiative Cooler Using Particle Swarm Optimization

2024

UNDERGRADUATE THESIS

POSTECH

- Explored inverse design mechanisms for multilayer structures to achieve color-controlled radiative cooling through thermal radiation.
- Research on self-emissive energy systems for sustainable thermal management.

2024

Samsung Display

- Fall 2023

POSTECH

POSTECH

- Fall 2023

POSTECH

POSTECH

- 2023

POSTECH

POSTECH

- ## Skills

Programming	Python, C/C++, Matlab, R, Kotlin, SwiftUI, Node.js, LaTeX
Web Dev	React, HTML5, Firebase
Cloud & LLM Ops	Google Cloud Platform, Microsoft Azure, Kubernetes, Ollama, GPT APIs
Design Tools	Figma, Adobe Photoshop, Illustrator, Premiere Pro, XD
Design Research	Affinity Diagramming, Thematic Analysis, Diary Study
Languages	Korean (Native), English (Fluent)