

# JISU KIM

Atlanta, GA | jisulog.k@gmail.com | (470) 652 9854 | jisulog.kim

## EDUCATION

### Georgia Institute of Technology (GT)

Atlanta, GA

*Master of Science in Human-Computer Interaction – Interactive Computing*

Expected: May 2025

Master's project: Contextual Questioner, Generate Contextual Questions with AI in Google Slides

Advisor: Richmond Wong

*Undergraduate Exchange Program in Computer Science*

Fall 2022

### Korea Advanced Institute of Science and Technology (KAIST)

Daejeon, Korea

*Bachelor of Science in Computer Science, Minor in Artificial Intelligence*

August 2023

*Double Major in Business and Technology Management*

### Korea National University of Arts

Seoul, Korea

*Undergraduate Exchange Program in School of Drama*

Summer 2022

## RESEARCH EXPERIENCE

### GT Design Intelligence Lab

Atlanta, GA

*Graduate Research Assistant; Advisor: Ashok Goel*

Jan. 2025 – Present

SAMI: LLM-based AI-Mediated Social Interaction in Online Learning Environments

- Implemented a self-explanation and self-correction feature in an AI social agent using the Task-Method-Knowledge model.
- [w.1] Designed a learnersourcing system using an AI social agent to enhance intrinsic and extrinsic motivation.

### KAIST Interaction Lab

Daejeon, Korea

*Research Intern; Advisor: Juho Kim*

Jan. 2022 – Aug. 2023

[c.1] StupidTutor: Understanding Users' Comprehension Ability from Inconsistent Large Language Models (LLMs)

- Designed a user study of 100+ question-answering datasets and used various explanation styles to show AI functionality.
- Developed the back-end for a user study interface using SQLite and Flask, collaborating with a front-end developer.
- Spearheaded data analysis and visualization of a user study with 250+ participants using Pandas with Python and R.

Grinder: Designing Object Detection Based on Human-AI Collaboration in Video Commerce

- Designed object detection framework with a human-in-the-loop approach, fine-tuning based on human-labeled data.
- Led 20+ remote unmoderated usability tests encompassing both qualitative studies and quantitative benchmark studies.

### KAIST Experience Design Lab

Daejeon, Korea

*Research Intern; Advisor: Yiyun Kang*

Mar. 2023 – Jul. 2023

Passage of Water: Raising awareness about freshwater scarcity through interactive online and offline media

- Translated surface water and ocean topography data from NASA JPL into a user-centric, interactive online game design.
- Contributed to the preliminary design of the online game's storyline, with the final version exhibited on Google Arts & Culture.

## PROJECTS

### SoundClouds, Participatory Music Generation Exhibition

Atlanta, GA

*Lead Developer; Advisor: Brian Magerko | Website*

Jan. 2025 – Present

A participatory music exhibition based on real-time soundscape generation through user interactions with inflatables.

- Led the development of an object detection model using YOLO for tracking user movements, enabling dynamic music generation.
- Collaborated cross-functionally with a music technologist for sound synthesis and a visual artist for spatial design.
- Explored how curiosity and awe-driven experiences influence users' perceptions and interactions with ambient intelligence in art.

### VAL, Interactive Hierarchy Task Network (HTN) System for Task Planning

Atlanta, GA

*Research Assistant; Advisor: Christopher MacLellan | GitHub*

Jan. 2025 – Present

Developed an interactive graphical user interface for HTN to enhance user control over task planning using React Flow.

### Contextual Questioner: Generate Contextual Questions with AI in Google Slides

Atlanta, GA

*Project Leader; Advisor: Richmond Wong | Talk*

Apr. 2024 – Present

Led a master's project on understanding AI use and non-use in slide creation and designed an AI agent for Google Slides.

### FORECST, Online Hackathon Website

Daejeon, Korea

*Project Leader; Advisor: Juho Kim | GitHub | Demo*

Aug. 2021 – Dec. 2021

Directed a team of 4 in the end-to-end website development for an online hackathon using React.js and Firebase during COVID.

WORK EXPERIENCE

<b>Tesla Inc.</b>	Fremont, CA
<i>Data Science Intern</i>	Aug. 2024 – Jan. 2025
Data Analysis and Predictive Modeling on Customer and Vehicle Churn	
<ul style="list-style-type: none"><li>Created and deployed a data pipeline for tracking customer ownership lifecycle, reducing erroneous data by 93.9%.</li><li>Built a customer churn prediction model with PR-AUC 0.704 using Pandas and R, handling multiple large-scale datasets.</li><li>Collaborated and presented to stakeholders biweekly, including finance, service, and customer support teams</li></ul>	
<b>Samsung SDS Co., Ltd. (Samsung Data System)</b>	Seoul, Korea
<i>Artificial Intelligence Intern</i>	Mar. 2021 – Aug. 2021
Development of a Real-time Background Segmentation Model for the Video Conference Platform	
<ul style="list-style-type: none"><li>Developed a PyTorch model achieving 1.5x speed, 34% higher accuracy, and 14% fewer parameters than the base model.</li><li>Leveraged unlabeled dataset training by knowledge distillation, improving accuracy by transfer learning and fine-tuning.</li><li>Integrated the developed model into Knox Meeting, a Samsung video conferencing platform.</li></ul>	
<b>Samsung Electronics Co., Ltd.</b>	Seoul, Korea
<i>Data Science Intern</i>	Jul. 2020 – Aug. 2020
Data Analysis of Key Performance Indicators (KPIs) from LTE Evolved NodeBs (eNBs) Statistical Data for KPI Modeling	
<ul style="list-style-type: none"><li>Extracted KPIs from LTE eNBs data and performed correlation analysis using Pandas with Python.</li><li>Collaborated with machine learning developers to optimize LTE eNB KPI modeling based on identified correlations.</li></ul>	

PUBLICATIONS

Conferences and Journal Papers

[c.1] **One vs. Many: Comprehending Accurate Information from Multiple Erroneous and Inconsistent AI Generations**

Yoonjoo Lee, Kihoon Son, Tae Soo Kim, **Jisu Kim**, John Joon Young Chung, Eytan Adar, Juho Kim

*FAccT 2024: ACM Conference on Fairness, Accountability, and Transparency.*

Posters, Demos, and Workshop Papers

[w.1] **Engaging Learnersourcing with an AI Social Agent in Online Learning**

**Jisu Kim**, Ashok Goel

*L@S 2024 Workshop on Learnersourcing: Student-generated Content @ Scale.*

SCHOLARSHIPS AND AWARDS

<b>GT Graduate Research Assistant Scholarship</b>	2025
<b>KAIST Outstanding Graduate Leadership Award</b>	2024
<b>GT International House I-Spirit Award</b>	2022
<b>Mirae Asset Park Hyeun Joo Foundation Overseas Exchange Scholarship</b>	2022
<b>Korea National Scholarship</b>	2018 – 2022
<b>KAIST Outstanding Leadership Award</b>	2020
<b>2nd Place, World Friends Korea ICT Volunteers Project Award</b>	2019
<b>2nd Place, KAIST Athletics Doubles Badminton Award</b>	2018
<b>1st Place, KAIST Civil and Environmental Engineering Undergraduate Research Award</b>	2018

LEADERSHIP AND ACTIVITIES

<b>Committee Member</b> – GT International House	2022
<b>Student President</b> – KAIST School of Computing; Representative of over 900 students.	2019 – 2020
<b>Mentor</b> – Tanzania ICT Volunteers	2019
<b>Team Leader</b> – KAIST Badminton Club	2019
<b>Vice Student President</b> – KAIST Freshman Learning Committee	2018

## TEACHING EXPERIENCE

---

### **Samsung SDS Co., Ltd. (Samsung Data System)**

Seoul, Korea

*Speaker and Blog Editor* | Blog (Korean)

Mar. 2021 – Aug. 2021

Hosted a monthly team seminar titled 'Introduction to AI for Novices' with content published on a Medium blog. Authored a highly popular blog post on 'Image Classification', which ranks in the top 3 Google search results in Korean.

### **NAVER Connect Foundation.**

Seoul, Korea

*Programming Mentor*

Jul. 2021 – Aug. 2021

Mentored 25 college-level and above students in the Python Boost course.

### **LG Electronics Inc.**

Daejeon, Korea

*Education Mentor*

Mar. 2019 – Dec. 2019

Organized Arduino, CAD, and 3D printer classes for 48 students from multicultural families.