Jisu Kim

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EDUCATION

Georgia Institute of Technology (GT) Atlanta, GA
Master of Science in Human-Computer Interaction, Interactive Computing Expected: May 2025
Master's project: Understanding AI Use and Non-use in Slide Creation Amongst Young Product Managers
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 INTERESTS

My research interests lie at the intersection of artificial intelligence (AI) and human-computer interaction (HCI). I am interested in helping lay users better understand and collaborate with AI. My goal is to enhance human productivity with AI.
Keywords: HCI, Human-AI Interaction, Human-AI Collaboration, Explainable AI, Data-driven Interaction

RESEARCH EXPERIENCE

Design Intelligence Lab (DILab) Atlanta, GA
Research Intern; Advisor: Ashok Goel Jan. 2024 – Present
SAMI: LLM-based AI-Mediated Social Interaction in online learning environments
- Enhanced the self-explanation feature of an AI social agent using the Task-Method-Knowledge model, improving completeness and correctness score by 6.94%.
- [w.1] Designed a learnersourcing system using an AI social agent to boost both intrinsic and extrinsic motivation of learners.
- Received an offer to continue as a Graduate Research Assistant from Fall 2024 to Summer 2025.

KAIST Interaction Lab (KIXLab) Daejeon, Korea
Research Intern; Advisor: Juho Kim Jan. 2022 – Aug. 2023
[c.1] StupidTutor: Understanding users' comprehension ability from inconsistent large language models (LLMs)
- Identified that inconsistency improve participants' comprehension score significantly by 13.29%.
- Designed a user study of 100+ question and answer datasets with various styles of explanation to display 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
- Led 20+ remote unmoderated usability tests encompassing both qualitative studies and quantitative benchmark studies.

GT Co-Well Computer Lab Atlanta, GA
Research Intern; Advisor: Jennifer Kim Aug. 2022 – Dec.2022
Pioneering virtual reality and explainable AI for neurodiversity in remote work scenarios
- Compared several AI models and designed different styles of explanations to demonstrate AI predictions.

INDUSTRY EXPERIENCE

Tesla Inc. Fremont, CA
Data Science Intern Aug. 2024 – Present
Data analysis and predictive modeling on customer and vehicle churn
- Created and deployed a data pipeline for tracking customer ownership lifecycle, reducing incorrect data by 93.9%.

- Analyzed and built customer churn prediction model using Pandas and R, handling multiple large-scale datasets.
- Collaborated and presented to stakeholders biweekly, including finance, service, and customer support teams, to gather data, dashboard, and features.
- Developed a predictive model using LLMs to identify repeat repair visits.

Samsung SDS Co., Ltd. (Samsung Data System) Seoul, Korea
Applied Artificial Intelligence Intern Mar. 2021 – Aug. 2021
Developing a real-time background segmentation model for the video conference platform
- Developed a PyTorch model achieving 1.5x speed, 34% higher accuracy, and 14% fewer parameters than the base model.
- Leveraged unlabeled dataset training by knowledge distillation, improving accuracy by transfer learning and fine-tuning.
- Integrated the developed model into Knox Meeting, a Samsung video conferencing platform.

Samsung Electronics Co., Ltd. Seoul, Korea
Data Science Intern Jul. 2020 – Aug. 2020
Data analysis of Key Performance Indicators (KPIs) from LTE Evolved NodeBs (eNBs) statistical data for KPI Modeling
- Extracted KPIs from LTE eNBs data and performed correlation analysis using Pandas with Python.
- Collaborated with machine learning developers to optimize LTE eNB KPI Modeling based on identified correlations.

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.

PROJECTS

Understanding AI Use and Non-use in Slide Creation with Google Workspace
Project Leader; Advisor: Richmond Wong
Led the master's project on 'Understanding AI Use in Slide Creation Amongst Young Product Managers' in a partnership with Google Workspace. Aiming for submission to CHI Late Breaking Work.

Raising Awareness about Freshwater Scarcity with Google Arts & Culture Lab and NASA JPL
Preliminary Researcher; Advisor: Yiyun Kang
Translated Surface Water and Ocean Topography data into the design of a user-centric interactive online game. The final output was exhibited both online at Google Arts & Culture Lab and offline at the UN Climate Change Conference 2023.

FORECST, Online Hackathon Website
Project Leader | GitHub | Demo
Directed a team of 4 in the end-to-end website development from ideation to deployment using React.js and Firebase, facilitating remote participation during the COVID-19 pandemic.

PRESENTATION AND 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, achieving over 2k views monthly and a total of 40k views. 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 Mar. 2021 – Jul. 2021
Mentored 25 college-level and above students in the Python Boost course.

LG Electronics Inc. Daejeon, Korea
Education Operations Mentor Mar. 2019 – Dec. 2019
Organized Arduino, CAD, and 3D printer classes for 48 students from multicultural families.

LEADERSHIP AND ACTIVITIES

Committee Member – GT International House 2022
Student President – KAIST School of Computing; Representative of 900 students. 2020
Mentor – Tanzania ICT Volunteers 2019
Team Leader – KAIST Badminton Club 2019

HONORS AND AWARDS

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

SKILLS

Programming Languages	Python, R, Java, JavaScript, C, C#, CSS, HTML, PHP, MATLAB, Assembly
Frameworks/Libraries	TensorFlow, PyTorch, Keras, CUDA, Scikit-Learn, OpenCV, React.js, Node.js, Pandas, NumPy, SciPy
Tools/Software	Android Studio, Git, Linux, Jupyter, Arduino, SQL, MongoDB, Flask, Firebase, Processing, CAD, Figma