

Research Interests

Human-Computer Interaction, Accessibility, AI-powered Visualization Tools

Education

MS/Ph.D	University of Massachusetts Amherst , Computer Science <ul style="list-style-type: none">GPA: 4.0/4.0	Amherst, MA, USA Sep 2024 - Present
B.S	Sungkyunkwan University , Computer Science and Engineering <ul style="list-style-type: none">GPA: 3.71/4.0 (converted)	Suwon, Korea Mar 2019 - Feb 2024
	The University of Texas at Austin , Electrical and Computer Engineering <ul style="list-style-type: none">Exchange student program	Austin, TX, USA Jan 2022 - May 2022

Publications

From Pixels to Primitives: Evaluating SVG Decomposition for Floor Plan Comprehension in Large Multimodal Models

- **Jeongah Lee**, Ali Sarvghad
- Under Review

From Text to Visuals: Using LLMs to Generate Math Diagrams with Vector Graphics [🔗](#)

- Jaewook Lee, **Jeongah Lee**, Wanyong Feng, Andrew Lan
- AIED 2025: 26th International Conference on Artificial Intelligence in Education (Acceptance rate: 19%)

IoT Edge-Cloud: An Internet-of-Things Edge-Empowered Cloud System for Device Management in Smart Spaces [🔗](#)

- Yoseop Joseph Ahn, Minje Kim, **Jeongah Lee**, Yiwen Shen, Jaehoon Paul Jeong
- 2023 IEEE Network Magazine

Research Experiences

HCI-VIS lab @ University of Massachusetts Amherst , Graduate Research Assistant <ul style="list-style-type: none">• Advisor: Dr. Ali Sarvghad 🔗	Amherst, MA, USA Sep 2024 - Present
IoT lab @ Sungkyunkwan University , Undergraduate Student Researcher <ul style="list-style-type: none">• Advisor: Dr. Jaehoon Paul Jeong 🔗	Suwon, Korea Jul 2021 - Nov 2021

Work Experiences

Seoul National University Bundang Hospital , Natural Language Processing (NLP) Researcher <ul style="list-style-type: none">• Developed a model that predicts lung cancer TNM stage using an Electronic Health Record dataset• Finetuned Large Language Models (LLMs) in resource-restricted settings, optimizing model performance through tailored prompt engineering techniques	Bundang, Korea Mar 2024 - Jul 2024
Cipherome, Inc , Machine Learning (ML) Engineer, Intern <ul style="list-style-type: none">• Developed the pipeline for an ML module within a clinician-focused medical data analysis platform• Designed Figma wireframes to improve user experience and UI/UX	San Jose, CA, USA Mar 2023 - Aug 2023
Naver Boostcamp AI Tech Program , NLP Engineer <ul style="list-style-type: none">• Led projects on Semantic Text Similarity, Relation Extraction, Open-Domain Question Answering, and Chatbot Development tasks	Remote Sep 2022 - Feb 2023
SK Planet Co.,Ltd. , Industry-Academic Cooperation Student Researcher <ul style="list-style-type: none">• Developed an AR rhythm game application for the Busan One Asia Festival using AR Core to provide location-based interactive experiences	Suwon, Korea Mar 2020 - Dec 2020

Awards & Honors

[Awards]

- 3rd Place (Grand Prize), Chung-ang University AI and Humanities Academic Paper contest Jan 2023
- 1st Place (Grand Prize), Kookmin University self-driving contest Jul 2021 - Nov 2021
- 3rd Place (Grand Prize), Sungkyunkwan University AI x Bookathon contest Jan 2021
- Volunteering Excellence Prize, NIA(National Information Society Agency) Dec 2020

[Scholarships]

- Academic Excellence Scholarship (top 12%) 2022
- Creative Scholarship (100% tuition support) 2021
- Sungkyun Software Scholarship (100% tuition support) 2019
- MegastudyEdu Scholarship (external) 2019

Teaching & Mentoring

[Teaching]

- Graduate Teaching Assistant** Sep 2024 - Present
 - *CICS 110: Introduction to Programming (Fall 2024)*
Led two lab sessions (60 students each) with hands-on instruction and grading support
 - *CS 383: Artificial Intelligence (Spring 2025)*
Held office hours for a class of 180 students and mentored 15 group projects

[Mentoring]

- Independent Study Mentor** Feb 2025 - Present
 - Aishwarya Vishnubhotla, Srikanth Kavuri (CS Undergraduate at UMass), Prachetas Padhi (ECE Master at UMass)
- Undergraduate Research Program Volunteers** May 2025 - Present

Volunteering/Leadership

- Panama World Friends Korea ICT e-volunteer** Nov 2020 - Dec 2020
- Mobile Application Programming Mentoring at Youngbok Girls' High School** Sep 2019 - Dec 2019
- College of Computing Student Council Public Relations Team** Mar 2019 - Dec 2019

Skills

- Languages:** Korean (native fluency), English (full professional proficiency)
- Computer/Programming:** Python, Pytorch, R, JavaScript, React.Js, HTML, CSS, C, C++, Java, Kotlin