

Jeongah Jasmine Lee

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[🔗 Personal Website](#)

[in Linkedin](#)

[G Google Scholar](#)

Research Interests

Human-Computer Interaction, Visualization, Accessibility, Health & Well-Being Technologies

Education

MS/PhD University of Massachusetts Amherst, Computer Science

- GPA: 4.0/4.0

Amherst, MA, USA

Sep 2024 - Present
(Expected Jun 2029)

BS Sungkyunkwan University, Computer Science and Engineering

- GPA: 3.71/4.0 (converted)

Suwon, Korea

Mar 2019 - Feb 2024

The University of Texas at Austin, Electrical and Computer Engineering

- Exchange student program

Austin, TX, USA

Jan 2022 - May 2022

Publications

[A.3] Towards an Age-Inclusive Understanding of Trust and Interpretation in AI-Generated Glanceable Health Visualizations

- Jeongah Lee, Gerindra Adi, Srikanth Kavuri, Nish Methuku, Vidhaan Naylesh Kothari, Ali Sarvghad
- Under Review

[A.2] Agentic Accessibility: A New Paradigm for Graphics Accessibility for Blind and Low-Vision

- Jeongah Lee, Srikanth Kavuri, Hari Iyer, Ali Sarvghad
- Manuscript in Preparation

[A.1] SVG Decomposition for Enhancing Large Multimodal Models Visualization Comprehension

- Jeongah Lee, Ali Sarvghad
- Manuscript in Preparation, arXiv:2511.03478

[C.1] 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%)

[J.1] 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, WHAT lab @ University of Massachusetts Amherst, Graduate Research Assistant

Amherst, MA, USA

- Advisor: Dr. Ravi Karkar, Dr. Ali Sarvghad
- Designed and developed human-centered AI systems that advance accessibility and well-being
- Led research on AI-driven mental health tools for Alzheimer's caregivers, integrating journaling, conversational interaction, and cognitive reframing (CBT) support

Sep 2024 - Present

IoT lab @ Sungkyunkwan University, Undergraduate Student Researcher

Suwon, Korea

Jul 2021 - Nov 2021

- Advisor: Dr. Jaehoon Paul Jeong
- Developed an IoT edge-empowered Cloud System for the visual control of IoT devices in a user's smartphone

Work Experiences

Seoul National University Bundang Hospital, Natural Language Processing (NLP) Researcher

Bundang, Korea

Mar 2024 - Jul 2024

- Developed a model predicting lung cancer TNM stage using an Electronic Health Record dataset
- Fine-tuned Large Language Models (LLMs) in resource-restricted settings, optimizing model performance through tailored prompt engineering techniques

Cipherome, Inc, Machine Learning (ML) Engineer, Intern

San Jose, CA, USA

Mar 2023 - Aug 2023

- Developed the pipeline for an ML module within a clinician-focused medical data analysis platform
- Designed Figma wireframes to improve the platform's user interface and experience (UI/UX)

Naver Boostcamp AI Tech Program, NLP Trainee

Remote

Sep 2022 – Feb 2023

- Led projects on semantic text similarity, relation extraction, open-domain question answering, and chatbot development tasks

SK Planet Co.,Ltd., Industry-Academic Cooperation Student Researcher

Suwon, Korea

Mar 2020 - Dec 2020

- Developed an AR rhythm game application for the Busan One Asia Festival using AR Core to provide location-based interactive experiences

Awards & Honors

[Awards]

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

[Scholarships]

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| • 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 - Dec 2025

- 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): Mentored students in 15 group projects and assisted with assignment design and evaluation (180 students).
- CS 571 *Data Visualization and Exploration* (Summer 2025), INFO 348 *Data Analytics with Python* (Fall 2025): Sole TA for CS 571 (35 students) and INFO 348 (60 students); independently managed grading, office hours, and assignment design.

[Mentoring]

Independent Study Mentor

Feb 2025 - May 2025

- Aishwarya Vishnubhotla, Srikanth Kavuri (CS Undergraduate), Prachetas Padhi (ECE Master)
- Topic: Conversational Accessibility - Enhancing Mobile Usability for Older Adults through Task-Oriented Agents

Undergraduate Research Volunteer Program ↗ Mentor

May 2025 - Sep 2025

- Gerindra Adi, Vidhaan Kothari, Nish Methuku (CS Undergraduate)
- Topic: Glanceable Health Visualization for Older Adults Using Large Multimodal Models [A.3]

Independent Study Mentor

Jul 2025 - Present

- Hima Varshini Surisetty, Durga Nirmalaswaran (CS Master), Jahnavi Sharma (CS Undergraduate)
- Topic: Post-Production Personalization (P³P) of Data Visualization - An AI-enabled Shift in Control from the Designer to the Consumer

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

Mar 2019 - Dec 2019

Skills

Technical Proficiencies: Python, Pytorch, JavaScript (React.js, D3.js, Node.js), Flask, HTML, CSS, MongoDB

Research Methodologies:

Qualitative: User Research, Semi-Structured Interviews, Prototyping, Usability Testing, Think-Aloud Protocol, Thematic Analysis

Quantitative: Survey Design, Experimental Design, Statistical Analysis, Modeling, Visualization Analysis

Tools & Platforms: Git, GitHub, Vercel, Render, Capacitor, Docker, Figma, Zeplin