# Jeongah Jasmine Lee

**in** Linkedin

**G** Google Scholar

## Research Interests \_

Human-Computer Interaction, Artificial Intelligence, Health, Visualization

## Education

B.S

MS/Ph.D University of Massachusetts Amherst, Computer Science

GPA: 4.0/4.0

Sungkyunkwan University, Computer Science and Engineering

GPA: 3.71/4.0 (converted)

The University of Texas at Austin, Electrical and Computer Engineering

Exchange student program

Amherst, MA, USA

Sep 2024 - Present

Suwon, Korea Mar 2019 - Feb 2024

Austin, TX, USA Jan 2022 - May 2022

## Publications \_\_\_\_\_

## Agentic Accessibility: A New Paradigm for Graphics Accessibility for Blind and Low-Vision &

Under Review

## SVG Decomposition for Enhancing Large Multimodal Models Visualization Comprehension 🗹

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

Advisor: Dr. Ali Sarvghad 

 (co-advised by Dr. Ravi Karkar 

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## Amherst, MA, USA Sep 2024 - Present

#### IoT lab @ Sungkyunkwan University, Undergraduate Student Researcher

• Advisor: Dr. Jaehoon Paul Jeong 🗹

• Developed an IoT Edge-Empowered Cloud System for the visual control of IoT devices in a user's smart-

Suwon, Korea Jul 2021 - Nov 2021

# phone

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

Developed a model that predicts lung cancer TNM stage using an Electronic Health Record dataset

Bundang, Korea Mar 2024 - Jul 2024

• Finetuned Large Language Models (LLMs) in resource-restricted settings, optimizing model performance through tailored prompt engineering techniques

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

Work Experiences \_\_\_\_\_

San Jose, CA, USA

• Developed the pipeline for an ML module within a clinician-focused medical data analysis platform

Mar 2023 - Aug 2023

Designed Figma wireframes to improve user experience and UI/UX

## Naver Boostcamp Al Tech Program, NLP Engineer

Remote

· Led projects on Semantic Text Similarity, Relation Extraction, Open-Domain Question Answering, and **Chatbot Development tasks** 

Sep 2022 – Feb 2023

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

Mar 2020 - Dec 2020

## Awards & Honors \_\_\_\_\_

## [Awards]

• 3 <sup>rd</sup> Place (Grand Prize), Chung-ang University AI and Humanities Academic Paper contest	Jan 2023
• 1 <sup>st</sup> Place (Grand Prize), Kookmin University self-driving contest	Jul 2021 - Nov 2021
• 3 <sup>rd</sup> 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
- CS 571: Data Visualization and Exploration (Summer 2025)
- INFO 348: Data Analytics with Python (Fall 2025)

#### [Mentoring]

## **Independent Study Mentor**

Feb 2025 - May 2025

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

#### Undergraduate Research Program Volunteers 🗹

May 2025 - Present

- Gerindra Adi, Vidhaan Kothari, Nish Methuku (CS Undergraduate at UMass)
- Topic: Glanceable Health Visualization for Older Adults Using Large Multimodal Models

# 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 \_\_\_\_\_

Programming Languages: Python, Pytorch, Javascript, Java, Kotlin, C, C++, R

Front-End: HTML, CSS, React.js, D3.js Back-End: Node.js, MongoDB, MySQL

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