Jeongah Lee

✉ jeongahlee@umass.edu   🔗 Personal Website   **in** Linkedin   **G** Google Scholar

Research Interests

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

Education

MS/Ph.D	**University of Massachusetts Amherst**, Computer Science		*Amherst, MA, USA*
	• GPA: 4.0/4.0		Sep 2024 - Present
B.S	**Sungkyunkwan University**, Computer Science and Engineering		*Suwon, Korea*
	• GPA: 3.71/4.0 (converted)		Mar 2019 - Feb 2024
	The University of Texas at Austin, Electrical and Computer Engineering		*Austin, TX, USA*
	• Exchange student program		Jan 2022 - May 2022

Publications

[C.1] From Text to Visuals: Using LLMs to Generate Math Diagrams with Vector Graphics ↗   2025
- Jaewook Lee, *Jeongah Lee*, Wanyong Feng, Andrew Lan
- 26th International Conference on Artificial Intelligence in Education

[J.1] IoT Edge-Cloud: An Internet-of-Things Edge-Empowered Cloud System for Device Management in Smart Spaces ↗   2023
- Yoseop Joseph Ahn, Minje Kim, *Jeongah Lee*, Yiwen Shen, Jaehoon Paul Jeong
- IEEE Network

Research Experiences

HCI-VIS lab @ University of Massachusetts Amherst, Graduate Research Assistant   *Amherst, MA, USA*
- Advisor: Dr. Ali Sarvghad ↗   Sep 2024 - Present

IoT lab @ Sungkyunkwan University, Undergraduate Student Researcher   *Suwon, Korea*
- Advisor: Dr. Jaehoon Paul Jeong ↗   Jul 2021 - Nov 2021

Work Experiences

Seoul National University Bundang Hospital, Natural Language Processing (NLP) Researcher   *Bundang, Korea* — Mar 2024 - Jul 2024
- 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

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 user experience and UI/UX

Naver Boostcamp AI Tech Program, NLP Engineer   *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
- Developed an indoor location recognition app using Wi-Fi fingerprinting to provide customized advertisements and benefits based on the customer's real-time location

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 @ University of Massachusetts Amherst   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]

Aishwarya Vishnubhotla   Feb 2025 - Present

- CS Undergraduate at Umass

Prachetas Padhi   Mar 2025 - Present

- ECE Master at Umass

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++