Sumin Park

Ulsan, Korea | suminpark@unist.ac.kr | 010-7187-1446 |

summary

Human-Centered AI, Fairness-Aware AI, and Graph Neural Networks (GNNs). Passionate about leveraging AI for equitable, explainable, and human-centric applications. Interested in interdisciplinary research at the intersection of AI × HCI and AI × Visualization to develop responsible and accessible AI models.

Education

UNIST , BS : Major in Industrial Engineering and Minor in Design — Spring 2021 – Spring 2025

- **Coursework:** Data Mining, Principle of Deep learning, Algorithm Trading, Cognitive neuroscience, UX design

Experience

Student Research Intern, Data intelligence Lab – UNIST AI — April 2024 - present

- Conducted research on fairness in recommendation systems, with an emphasis on fairness-aware Graph Neural Networks (GNNs).
- Currently studying fairness principles in career recommendation models, aiming to improve equitable outcomes for diverse user groups.

Student Intern, 3Dshape LAB, UNIST CSE — Summer 2023

- Development of a web-based 3D viewer for medical images, focused on rendering brain models in a 3D mesh
- Enhancing accessibility and user interaction. Contributed as a frontend developer, implementing intuitive UI components and optimizing the visualization for seamless user experience

Industry Experience

Machine Learning Engineer, **10fingers** – Seoul — Winter 2025

- Developed machine learning and deep learning algorithms to predict the popularity of entertainment and dining venues.
- Designed and implemented a store recommendation system that identifies potential partnership venues based on similarity and predicted popularity scores.
- Integrated machine learning models with the back-office system to support internal decision-making and streamline operational workflows.

Developer, LABis (University Startup) – Ulsan — 2023

- Developed frontend and machine learning components, improving system usability and performance.
- Conducted usability testing and iteratively refined UI/UX for a better user experience.

Awards

The 4th UNIST-KAIST-POSTECH AI&Data Science Competition

- Developed a Finance Retrieval-Augmented Generation (RAG) system to efficiently retrieve and generate financial insights using AI.
- Finalist - Encouragement Award

2024 UU Digital Healthcare Hackathon

- Developed a Large Language Model (LLM) system designed to assist schizophrenia patients by providing personalized and empathetic support.
- Outstanding Accomplishment Award

Emotion Detection Model in VR Game, Interactions Lab - UNIST

- Designed and developed a VR game using Unity to facilitate human-computer interaction (HCI) research by conducting user experiments.
- Implemented an emotion detection system that analyzes user behavior and physiological signals to enhance user experience and adaptability.
- Achieved 2nd Place in the Practical Problem Solving Competition for innovative application of HCI principles in virtual environments.

Technologies

Programming Languages: Python, JavaScript, C#, SQL
Machine Learning & Deep Learning: TensorFlow, PyTorch, Scikit-learn
Graph-based AI: NetworkX, DGL (Deep Graph Library)
Development Tools: Git, Docker
OS: Windows, Linux, macOS