JUNYOUNG KWON

Seoul National University of Science and Technology (SeoulTech)
Department of Computer Science and Engineering, Junior (3rd Year, 2nd Semester)
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EDUCATION

Bachelor of Science in Computer Science and Engineering

Seoul National University of Science and Technology (SeoulTech) | Expected Graduation: February 2027

- GPA: 3.95/4.5
- Transferred from the Department of Environmental Engineering to Computer Science and Engineering (Spring 2022)
- Academic Excellence Scholarship (2nd Year, 2nd Semester)

RESEARCH INTERESTS

Large Language Models, Multi-modal learning, Agentic AI, AI Applications in Finance

Internships

Research Intern

Korea Institute of Science and Technology (KIST) | July 2025 - August 2025

- Developed gait analysis system using 5 pressure sensors at the Bionics Research Center
- Discovered and resolved critical Endian byte-order bug in sensor data processing pipeline through meticulous raw data analysis
- Refactored legacy C# codebase (7,500 → 5,250 lines, 30% reduction), improving system performance and maintainability
- Authored and presented an academic poster at the 2025 Fall Conference of the Korean Society for Precision Engineering (Bio-Health 25APP09-033)

PUBLICATIONS & PRESENTATIONS

Kim Choong Hyun, Kim Jin Wook, Lee Dong Wook, Jang Tae Won, Joo Yoon Jin, Kwon Jun young. (2025). *"Gait Disorder Analysis Using Ground Reaction Force."* Korean Society for Precision Engineering 2025 Fall Conference, Poster Presentation, November 14, 2025.

AWARDS

- **Samsung AI Challenge : 2nd Place (Excellence Prize, KRW 5,000,000)**
  Recognized for outstanding performance in the Visual Rich Document Understanding Competition (2025).
- **Seoul National University of Science and Technology – Excellence Award for Field Training Essay (Encouragement Prize)**
  Received an Encouragement Award for outstanding internship reflection essay based on field training experience at KIST Bionics Research Center .(2025)
- **Academic Excellence Scholarship (Tuition 20% Reduction)**
  Awarded by Seoul National University of Science and Technology for academic excellence (Fall 2024).

PROJECT EXPERIENCE

Samsung AI Challenge Award

Visually- rich Document Understanding Competition| July 2025- August 2025

- Performed document understanding tasks using multimodal deep learning approaches
- Developed detection algorithms for text extraction from complex document layouts
- Developed reading order algorithms for complex document layouts
- Awarded Excellence Prize (KRW 5,000,000) for outstanding performance

LG Aimers 6th Hackathon: Pregnancy Success Prediction for Infertility Patients (Top 9%)

DACON Hackathon, LG AI Research | January 2025 - February 2025

- Led team project predicting pregnancy outcomes using medical data with 30%+ missing values
- Applied statistical significance testing and KNN-based imputation for robust data preprocessing
- Implemented domain-knowledge-driven feature engineering based on medical literature review
- Achieved ROC-AUC score of 0.741, ranking in top 9% among all participants

AI-based Investment Assistant Chatbot (1st Place among 80+ participants)

Open-Source Software Course Project | September 2024 - December 2024

- Developed AI chatbot using LangChain and RAG (Retrieval-Augmented Generation) to address hallucination issues
- Built data pipeline integrating Yahoo Finance, NewsAPI, and RSS feeds for real-time financial data
- Implemented FAISS vector database with optimized embedding dimensions and chunking strategies
- Automated multilingual news translation and normalization using LLM-based preprocessing

Media

Featured in **SeoulTech Department of Computer Science News (2025)**
SeoulTech student team recognized with the Excellence Prize (2nd Place) at the 2025 Samsung AI Challenge

TECHNICAL SKILLS

Programming Languages: Python, C++, C#, Java

Data Analysis & ML: NumPy, Pandas, Scikit-learn, PyTorch, TensorFlow, Matplotlib, Seaborn

Mathematical Foundation: Linear Algebra, Discrete Mathematics, Calculus (Probability & Statistics planned for Spring 2026)

ADDITIONAL EXPERIENCE

LG Aimers 6th Education Program

LG AI Research | 2024

- Completed comprehensive ML curriculum covering supervised/unsupervised learning, deep learning, and AI ethics
- Gained hands-on experience with algorithm selection, hyperparameter tuning, and ensemble methods
- Developed practical understanding of ML model optimization using Optuna and cross-validation techniques

LANGUAGES

Korean (Native), English (TOEIC 840)

REFERENCES

Prof. Sunglok Choi

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