Jaeha Yoon

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EDUCATION

Sejong University   **Gwangjin, S. Korea**
B.Eng. in Artificial Intelligence (Expected Feb. 2027)   **Mar. 2021 – Feb. 2027**

- Relevant Modules: Machine Learning, Deep Learning, Image Processing, Natural Language Processing, Computer Structure, Digital Signal Processing (in progress)
- GPA: 4.35/4.5

RESEARCH EXPERIENCE

Pattern Recognition & Machine Learning Lab   **Sejong University**
Undergraduate Researcher, Advisor: Changjae Chun   **Jan. 2024 – Present**

- Conducting research on improving accuracy prediction of protein–protein docking models using Explainable AI (XAI) and ensemble models
- First-author manuscript in preparation

Gachon X Sejong University Joint Academic Conference   **Gachon University**
Undergraduate Researcher, Advisor: Haemin Cho   **Jul. – Aug. 2025**

- Conducted independent research on Comparative Analysis of Music Embedding Quality under Different Segmentation and Aggregation Strategies
- Evaluated transformer-based and pooling-based aggregation strategies on the MARBLE benchmark using the MuQ embedding backbone, analyzing trade-offs between performance and efficiency
- Authored an undergraduate research paper on *Comparative Analysis of Music Embedding Quality under Different Segmentation and Aggregation Strategies*

Generative Artificial Intelligence Lab   **Sejong University**
Undergraduate Research Assistant, Advisor: Hyewon Jang   **Jul. – Aug. 2024**

- Participated in the NRF-funded project *"Research in STEM Education Policy in the Era of Post-Artificial Intelligence"*
- Assisted in experiments for the study *"Less is more: A multimodal exploration of how limited AI shapes team physics problem solving"*
- Conducted data collection and supported multimodal analysis (Gaze Estimation, Pose Detection) for collaboration research
- Analyzed participant interaction using computer vision techniques to study the impact of limited AI on team problem solving

Biomedical AI Course Project   **Sejong University**
Course Project Research, Advisor: Gilyong Lee   **Mar. – May. 2025**
- Led end-to-end development of an AI system predicting cognitive function from smartwatch data, including data collection, preprocessing, feature engineering, and deep learning model design and execution

EXTRACURRICULAR ACTIVITIES

KT Community Problem-Solving Project   **KT & Jongno-gu Office**
Project Developer   **Jul. – Aug. 2025**
- Developed the official notification chatbot for Jongno-gu Office to send alerts on public assemblies.
- Developed a pipeline to automatically extract traffic control information by crawling bus route data and leveraging a Large Language Model (LLM) for parsing
- Built a notification service API to provide real-time alerts on traffic disruptions

ESCAPER (University Central Jiu-Jitsu Club)   **Sejong University**
President   **Sep. 2024 – Present**
- Served as President of the Sejong University Jiu-Jitsu Club, organized joint training with Konkuk University, and established a partnership with Flame Stone Jiu-Jitsu

AI Malpyeong   **National Institute of Korean Language**
Everyday Conversation Summarization Competition   **Jul. – Aug. 2024**
- Fine-tuned LLM using QLoRA and few-shot prompt tuning to summarize daily conversations

Republic of Korea Army – Transport Battalion   **Gangwon-do, S. Korea**
Driver, Sergeant   **Mar. 2022 – Sep. 2023**
- Completed an AI Education Program (hosted by Elice Inc.), including projects on sensor-based fault classification and time-series analysis of historical WWII data.

Career Lecture   **Bundang Jungang High School**
Guest Lecturer   **Jun. 2021**
- Delivered a one-day lecture on Artificial Intelligence for high school students as part of the "Career Recipe" program
- Introduced the fundamentals of AI and shared career insights in the field

Student Council   **Sejong University**
Member of Planning Department   **Mar. – Jul. 2021**
- Contributed to establishing the foundation of the newly created AI Department

Student Council
- Planned and organized student events and academic activities to strengthen the department community

HONORS & AWARDS

KT Digital Talent Scholarship   **Mar. 2025 – Present**
- Selected as a recipient for a competitive scholarship program supporting outstanding students in ICT and AI fields

KT Digital Talent Award – *"D-Injae's Pick"*   **Aug. 2025**
- Popular Choice for KT Community Problem-Solving Project

Bronze Prize, 2025 AI Challenge   **Jun. 2025**
- Sejong University

Academic Excellence Scholarship, First Semester 2025   **Jun. 2025**
- Ranked 3rd in Academic Standing
- Declined offer due to reception of another scholarship

Grand Prize, 2024 English Speaking & Presentation Contest   **Dec. 2024**
- Sejong University

Encouragement Award, 2024 College Academic Festival   **Dec. 2024**
- Sejong University, Software Convergence College, Planning Track

Bronze Prize, 2024 AI Challenge   **Nov. 2024**
- Sejong University

Academic Excellence Scholarship, First Semester 2024   **Jun. 2024**
- Ranked 3rd in Academic Standing

Encouragement Award, 10th Sejong University SW·AI Hackathon   **Oct. 2021**