Woorim Shin

STUDENT • **EWHA WOMANS UNIVERSITY**

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Education

Ewha Womans University   *Seoul, South Korea*
Undergraduate student in Computer Science and Engineering   *Mar.2023 - Current*

Work Experiences

SDIJ Forest team   *Apr, 2023 - May, 2025*
Project Leader - Korean CSAT Private Education Service Planning & Development

Hiconsy Intern   *Jun, 2023 - Current*
AI R&D Intern - Korean Educational ASR System & MLOps Pipeline Development

Projects

AI Subtitle Generation Model for Korean Educational Content   *Jun, 2025 - Current*
End-to-end Korean ASR system development with advanced ML pipeline

- Fine-tuned Whisper Large-v3 for Korean educational content with **275% segmentation improvement**
- Built complete ML pipeline with LoRA, multi-GPU training, and RAG post-processing system

Educational Q&A Analysis System   *Jan, 2025*
GPT-4 fine-tuning for Korean literature and math question classification

- Solved "impossible" Korean literature classification using GPT-4 fine-tuning with **80% accuracy**
- Built real-time Streamlit dashboard for educational question analysis and categorization

Student Sentiment & Text Analysis Platform   *May, 2024*
Korean text mining platform for educational feedback analysis

- Korean text mining platform for student feedback with network visualization analysis
- Automated sentiment categorization system for educational content improvement insights

Large-scale Educational Forum Crawling System   *Sep, 2023 - Dec, 2023*
Multi-platform web scraping with Korean morphological analysis

- Large-scale educational forum crawling system with Korean morphological analysis
- Robust multi-platform data extraction with automated processing and visualization pipelines

Research Interests

Parameter-Efficient Fine-Tuning (PEFT) Optimization
Automated configuration search for optimal PEFT architectures, inspired by recent AutoPEFT research and my experience with LoRA parameter tuning for Korean ASR systems

Multi-Objective Optimization in Distributed Training
Hardware-aware PEFT deployment strategies and multi-GPU resource allocation optimization, building on my hands-on experience with DeepSpeed and distributed Whisper fine-tuning

Universal Domain Adaptation & Multi-Task Fine-Tuning
Context-aware PEFT methods for seamless cross-domain deployment, inspired by challenges in adapting general models to specialized domains like education, healthcare, religion, and law

Efficient ML Systems for Real-world Applications
End-to-end ML pipeline optimization from data preprocessing to model deployment, with focus on bridging the gap between research and production systems

Relevant Coursework

AI/ML & Data Science
Machine Learning, Reinforcement Learning, Natural Language Processing, Data Science, Open SW Project (Computer Vision & Deep Learning)

Mathematical Foundations
Calculus, Linear Algebra I, Engineering Mathematics, Discrete Mathematics

Computer Science Core
Data Structures, Computer Algorithms, Database Systems, Operating Systems, Computer Architecture

Programming & Software Engineering
C Programming, Java Programming, Object-Oriented Programming, System Software & Practice