Sangwoo Park

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Education

Yonsei University *March 2021 - Current*
BS in Computer Science

- **Expected Graduation Date**: August, 2025
- **GPA**: 4.11/4.3
- **Ranking within Department**: 6/177
- **Related University Coursework:** Architecture of Computers, Operating Systems, Information Security, Computer Networks, Computer Vision, Big Data, Natural Language Processing, Machine Learning, Multi Core and GPU Programming, Algorithm Analysis for AI, Theory and Practice of Deep Learning, Introduction to Multi modal Deep Learning, Database Management Systems, Data Structures, Linear Algebra, Probability and Statistics, Object Oriented Programming, Computer Programming
- **Extra Curricular Coursework:** Stanford CS236 Deep Generative Models, UC Berkeley CS 285 Deep Reinforcement Learning

Awards

2024-1 Distinguished Honors (top 1% of the students in their respective field of study) *Yonsei University, August 2024*

SW-Centered University Consortium Industry-Academia Cooperation Project Excellence Scholarship *Yonsei University, July 2024*

2024-1 Software Capstone Design Excellence Award *Yonsei University, June 2024*

2023-1 Honors (top 10% of the students in their respective field of study) *Yonsei University, August 2023*

2022-1 High Honors (top 3% of the students in their respective field of study) *Yonsei University, August 2022*

2021-2 Honors (top 10% of the students in their respective field of study) *Yonsei University, February 2022*

2021-1 Honors (top 10% of the students in their respective field of study) *Yonsei University, August 2021*

Experience

Research Internship *Seoul, South Korea*
Yonsei University DLI lab advised by professor Jinyoung Yeo *July 2023 – July 2024*

- Participated in NLP Medical AI project to enhance diagnosis of Alzheimer disease, using CoT prompting on Large Language Models to collect filtered medical data which later on was distilled to smaller language models, securing both stability and efficiency. [**July 2023 - August 2023**]
  - Engaged in early stages of research, mainly pilot study
  - Performed required experiments, including fine-tuning data obtained from Large Language Models by utilizing multiple GPUs.
- Major participant in research project aiming to build a framework inspired from Retrieval-Augmented Generation, which can enhance the reasoning capabilities of Large Language Models as decision making agents in website environment, without the use of reinforcement learning or imitation learning.[**January 2024 - July 2024**]
  - Heavily involved throughout course of research project, including pilot study, while also being key

contributor in deriving the research topic and direction.
- Served as code developer and experimenter during the project

Projects

Sporting Video Classification project *link to project*

- Developed video classification framework via integrating 3D CNN models and Gated Recurrent Unit(GRU) neural network, through dividing videos into chunks of frames, later fine tuned on custom dataset.
- Evaluated on UCF 101 benchmark that consists of videos related to sports.
- Team Leader for in-class project for Theory and Practice Of Deep Learning (AAI3201.01-00)
- Tools Used: Python, Pytorch

Small Scale Study-Purpose Projects

- Attempted to study the structure of vision transformer model through utilizing its capacities by fine tuning it on medical image dataset along with its labels uploaded as diabetic retinopathy symptom diagnosis competition(link to code and data).
- Practiced LLM training and prompting through coping with Kaggle LLM (advanced) science exam competition by directly fine tuning data on the given dataset, utilizing distillation of advanced models such as GPT-3.5 turbo. Such curated dataset was used to solve the lack of data of given task while reducing the need for high computing power by leveraging smaller language models.(link to code and data).
- Tools Used: Python, Pytorch

Software Capstone Design (2) Project *Currently Private Repo*

- Awarded with excellence prize from the university
- Participated in university-wise academic paper project (not published) based on thesis: ***The utilization of offline-generated external-memory and its dynamic usage would be able to enhance the decision making process of agents in website environment on unseen websites***, jointly researched with DLI lab as research intern.
- Tools Used: Python, Pytorch, Javascript, Playwright, Dockers

Technologies/Languages

Programming Languages: C++, C, python, JavaScript

Frameworks: Pytorch, Tensorflow, Huggingface, Langchain, Playwright

Languages: Korean: Native, English: Proficient

- **IBT TOEFL**: 105/120