Minsu Park

Personal Data

Phone	+82 10-7725-5172
Email	minsu.park@vision.snu.ac.kr
github	https://github.com/0601p

Education

Yonsei University Mar 2020 - Feb 2025	Bachelor's degree in Computer Science.
Seoul National University Mar 2025 -	Master's degree in Interdisciplinary Program in Artificial Intelligence(IPAI). Advised by Prof. Gunhee Kim, Seoul National University Vision & Learning Lab(SNUVL)

Publications

Exploring generalizable features in face forgery detection.	• Improved face forgery detection performance at unseen domain by train model to get generalizable features, using domain adversarial method and contrastive learning method. • Our paper, presentation • Our paper accepted to IPIU2024.
Improving Multi-lingual Alignment Through Soft Contrastive Learning	• Improved bitext mining performance using soft contrastive learning, which uses well-trained monolingual spaces to weight each negative samples in contrastive learning. • Our paper accepted to NAACL SRW 2024.
Generative Adversarial Embedding Network via Pseudo-Inverse transformation of the Generator.	• Proposed a novel GAN framework that incorporates a pseudo-inverse based encoder with a prior alignment adversarial loss. • Our paper accepted to KCC2025.
MAVIS:A Benchmark for Attributed Visual Question Answering with Multimodal Documents	• The first benchmark for multimodal attributed question answering, providing 157k citation-annotated visual QA instances and new evaluation metrics. • Our paper accepted to AAAI2026.

Work Experience

Internship Dec 2022 - Jun 2023	Yonsei Vision and Learning Lab (Prof. Jonghyun Choi's Lab) • Training Image Classification Model for Mobile Settings

- Implemented the train, evaluation, and inference code, and trained the model.
- Considering that the training dataset has many incorrect data, suggested using noisy label classification methods. implemented Co-teaching and Label Refinery method.
- Evaluated our model using confusion matrix.

Industry-Academic Cooperation
Dec 2022 - Apr 2023

YAI x Pozalabs

- Researching MIDI Generating Model for Music Generation
  - Developed a model for combinatorial music generation utilizing the ComMU dataset. Our task was to generate MIDI files based on given metadata using NLP model, TransformerXL.
  - Proposed and implemented Group Encoding method and Soft Label for ComMU and trained models using each method.
  - Check our official github to get explanation about our methods.

Industry-Academic Cooperation (Internship)
Sep 2023 - Present

YAI x Wecover (Linq)

- Researching language-agnostic semantic embedding space
  - Proposed new contrastive learning method(loss and finetune method) to align multilingual language embeddings.
  - Implemented the train and evaluation, and trained the model.
  - Check our paper here.

Rewards

모빌리티 SW 해커톤
Hyundai Mobis, Feb 2023

- Won the 2nd prize.
- Developed an STT model that performs well in a noisy mobility environment.
- Processed data for noise remove model. Mobility noise and speech were synthesized carefully and transformed them into spectrogram using FFT.
- Check our github to see codes and descriptions.

Software Capstone Deisgn 1
Yonsei Univ, Jun 2023

- Won the 1st prize.
- More descriptions are at <Courses and Lectures>
- Check our github to see codes.

SW 중심대학 공동 AI 경진대회
SW 중심대학협의회, Jul 2023

- Won the 4th prize(SW 중심대학협의회장상).
- We trained satellite image segmentation model.
- Implemented train codes and preprocessing codes.
- Trained model that is combination of Upernet and DCNv3.
- Check our github to see codes.

Prompt-er Day Seoul 2023

- Advanced to the Finals(within the top 20).

OpenAI x SKT, Sep 2023

- Developed a pipeline that generates reports via RAG, COT and prompt engineering using diverse data.
- Implemented semantic search algorithm using ChatGPT embeddings and vector database. Improved chunking quality using visual info and structural info.
- Check our github to see codes and descriptions.

Academic Excellence Scholarship
Yonsei Univ, Spring 2023

Personal Projects

Deep Learning practices

- Implemented and trained DQN, DDPM, GAN, DCGAN, InfoGAN, Transformer, VAE, based on the papers.
- Project github

ChatWine

- Developed chatbot for wine recommendation using RAG and prompt tuning.
- Project github

Courses and Lectures — Projects

Linear algebra and its applications
Yonsei Univ, Fall, 2021

A.I
Yonsei Univ, Spring, 2022

- Stock Price Prediction using RNN.
- Project github

Theory and practice of deep learning
Yonsei Univ, Fall, 2022

- Modifying convolutional layer, skip connection, losses, backbone layers of Unet.
- Project paper, presentation

Computer Vision
Yonsei Univ, Fall, 2022

AI convergence practice
Yonsei Univ, Fall, 2022

- Converting a style of image to that of a Korean painter.
- Our ckpt

Multi-Core and GPU Programming
Yonsei Univ, Spring, 2023

- Implemented 1D, 2D CNN, matrix multiplication, sum reduction with CUDA.

Software Comprehensive Design 1
Yonsei Univ, Spring, 2023

- Improving zero-shot performance on MaskCLIP using global context of images.
- Won the 1st prize.
- Our github, paper, presentation

Software Comprehensive Design 2
Yonsei Univ, Fall, 2023

- Exploring generalizable features in face forgery detection.
- Accepted to IPIU2024

Machine Learning in Bioinformatics Seoul Univ. Spring, 2025	
Creative and Independent AI Research 1	• Generative Adversarial Embedding Network via Pseudo-Inverse transformation of the Generator. • Accepted to KCC2025
모두를 위한 딥러닝 2 Youtube lecture Youtube lecture, HKUST Sung Kim	• Learned and practiced numpy, PyTorch and basic deep learning methods. Implemented train, test, eval codes and trained simple CNN, RNN models. • github
Pytorch Zero to All Youtube lecture, HKUST Sung Kim	
Deep Learning for Computer Vision (CS231n) Youtube lecture, Stanford Univ, 2017	

Skills

Programming Languages	C, C++, C#, Python, Java, JavaScript
Deep Learning Framework and Tools	PyTorch, Huggingface, mmsegmentation, CUDA, Langchain, OpenAI API
Web Dev	React,js, Flutter, HTML, CSS, Django, SQL
Natural Languages	English, Korean(native)