Hyeon Si Eun

010-8484-9619 /hyeonsieun agustldms5651@gmail.com

Department of Electric and Electronic Engineering, Yonsei University

Education

(B.S) Electric and Electronic Engineering Mar 2021 - Today
Yonsei University

(Certification) LG AImers Aug 2023
LG AI research & Ministry of Employment and Labor

(Certification) Yonsei DX Academy (Machine Learning & Deep Learning) Jan 2023
Yonsei University Ministry of Academic Culture

(Certification) 2022 1st OUTTA CV & NLP Bootcamp Aug 2022
OUTTA

(Certification) 2022 Artificial Intelligence and Machine Learning Education Aug 2022
Yonsei University Innovation Center for Engineering Education

(B.S) Mathematic Education Mar 2015 - Feb 2021
Jeju University

License & Awards

A prize for excellent academic performances Aug 2023
» Issued by : Yonsei University

A scholarship student by the Seah Haiam Scholarship Foundation June 2022
» Issued by : Seah Haiam Scholarship Foundation

Secondary School Mathematics Teacher (Grade 2) Teaching Certification Feb 2021
» Issued by : Jeju University

OUTTA 1st Bootcamp Outstanding Participant Award (1st Prize) Aug 2022
» Acquired from: OUTTA, Seoul National University Global Engineering Education Center, Seoul National University Engineering Education Innovation Center

OUTTA 1st Bootcamp Outstanding Team Project Award (1st Prize) Aug 2022
» Acquired from: OUTTA, Seoul National University Global Engineering Education Center, Seoul National University Engineering Education Innovation Center

Experience

OUTTA Sep 2022 - Today
CEO, and Representative instructor of OUTTA AI BootCamp.

- I am currently the CEO of the OUTTA, which is the non-profit AI education organization. And I'm the general director and representive instructor of the OUTTA AI Bootcamp.
- At the OUTTA AI Boot Camp, I am teaching the basic knowledge of deep learning, such as transformers, object recognition, and attention.
- In addition, it is responsible for administrative tasks such as tax processing and human resource management, as well as technical roles such as main website management and student data management.

Math, English and Programming Instructor Activities Mar 2015 - Today
Teacher / Mentor / Problem setter and judge

- I was a Math Teacher at some High schools in Jeju.
- I am currently Math/English mentor for high/middle school students at Seoul Metropolitan Office of Education and KT Group Hope Sharing Foundation.
- I was a Python and Arduino instructor at Digital Sprout Camp hosted by KAIST X MIDAM Scholarship X Sandbox Gaming.
- I was a member of the committee that created and graded Python questions at the Aramco Coding World Cup

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Undergraduate Intern Jan 2023 - June 2023

Worked as undergraduate intern in Multidimensional Insight Lab

- Participated in music and dance database construction and preprocessing projects
- Graduation research was conducted using this database

Yonsei university central Computer Club(YCC) Mar 2022 - Today

Executive, Head of Academic Department

- General Director of the 1st YCC X KUCC[1] AI Bootcamp
- Main instructor for Numpy & Pandas, Artificial Neural Network, Attention, and Transformer at the 1st YCC X KUCC AI Bootcamp
- General Manager of YCC Internal Projects
- Machine learning & Deep learning Paper Study Manager

Projects

Face-to-Music Jan 2023 - Today

- Graduation thesis of the Department of Electrical and Electronic Engineering at Yonsei University
- I implemented an AI that recognizes emotions from the facial expressions in the inputted photo and generates music matching those emotions
- The implementation is based on MusicTransformer, VGGNet
- Datasets used : MetaMIDI Dataset, FER2013

Text-to-Image Jan 2023 - Today

- As the general director of the 2nd OUTTA AI Bootcamp, I developed the final project to be assigned to the participants
- I implemented an AI that generates the most suitable image when a desired picture is input as text
- The implementation is based on CLIP, LAFITE, StackGAN and AttnGAN
- Datasets used : MS-COCO

AI coaching for facial expression acting Aug 2022

- I participated in the 1st OUTTA AI Bootcamp and carried out the final project required for the completion of the bootcamp.
- After inputting a phrase from everyday life or a movie line that one wants to act, when the person performs the facial expression acting looking at the webcam, the score of the facial expression acting is displayed on the screen
- The implementation is based on BERT and VGGNet. And OpenCV is used.
- Datasets used : FER2013, Korean SNS Conversation Dataset which can be downloaded from the AI HUB site

Out of distribution Detection method for a MNIST classification Jun 2023

- Final Project for the senior year major course 'Deep Learning Lab' in the Department of Electrical and Electronic Engineering at Yonsei University.
- The task is to train a classifier on an In-distribution dataset, then correctly predict on similar test data, while excluding Out-of-distribution data.
- The implementation is based on ODIN, Mahalanobis and GAN.

Music Genre Classification Dec 2022

- Personal project to study Audio signal processing.
- I extracted Mel Frequency Cepstral Coefficients, Mel-Spectrogram, Chroma vector, and Tonnetz from audio using the librosa library, and used them to classify the genre of music.
- The implementation is based on Fully Connected Layer. And librosa is used.
- Datasets used : GTZAN Dataset

Automatic hashtag generation AI May 2023 - July 2023

- Personal project to study CLIP
- I implemented an AI that generates suitable hashtags for the inputted photo.
- The implementation is based on CLIP and Transformer
- Datasets used : HARRISON dataset

[1]Korea Unibersity central Computer Club

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Developing a 2D flying shooting game that operates on a Xilinx FPGA Jun 2022

- » Final project for the 'Introductory Digital Labs' major course in the third year of the Department of Electrical and Electronic Engineering at Yonsei University.
- › Software used : Vivado, Vitis
- › Programming languages used : Verilog, C

Design of Modified AES128 Decryptor based on GF(256) Dec 2022

- » Final project for the 'System IC Design' major course in the third year of the Department of Electrical and Electronic Engineering at Yonsei University.
- › Software used : ModelSim, MobaXterm
- › Programming languages used : Verilog, C

Engineering Skills

Computer Languages Python, C, C++, Verilog, MATLAB
Software Available Vivado, Vitis, MobaXterm, ModelSim, VS code, Anaconda, MATLAB
AI libraries available Pytorch, tensorflow, jax, Flax, Keras, scikit-learn, Pandas