SUNGJUN (ANDY) HAN

DETAILS

+82-1034396627
andyhan0512@gmail.com

LINKS

Portfolio

LinkedIn

SKILLS

Python, C++

Deep Learning: TensorFlow, Keras, Pytorch

Data Organisation: Pandas, NumPy

Data Visualization: Plotly, Matplotlib

Interpersonal Communication

Microsoft Office

LANGUAGES

English

Korean

INTERESTS

Captain of College Football Team, Event Officer of Imperial College Korean Society

EDUCATION

MEng Electronic and Information Engineering, Imperial College London
September 2019 — July 2023

2:1 Honours with key modules including Mathematics, Machine Learning, Deep Learning, Computer Vision, Advanced Databases, System Performance Eng., ISA & Compilers

WORK EXPERIENCE

Offer for Senior Engineer at LG Display, Korea
November 2023

• Offered a lead role in leveraging machine learning techniques to analyse big data related to small OLED components for digital transformation initiatives.

AI Research Intern at Qraft Technologies, Korea
July 2022 — September 2022

• Participated in AXE (AI Order Execution) Team to develop and apply various SOTA AI algorithms used to detect and execute orders using trading signals from NASDAQ.

Helped develop and train AI trading algorithm models using DeepLOB algorithm (CNN + LSTM) and TransLOB (CNN + Transformer) on limit order book (LOB) and average volume.

• Developed a C++ custom Bollinger band and momentum algo trading bot on NASDAQ stocks and averaged a profit of 2.3% per day on TSLA stocks during regular market hours.

• Parsed and processed large scale trading data such as LOB, OHLC data from NASDAQ

Startup Intern at Chain Lightning Company, Korea
July 2021 — September 2021

• Assisted in the design and coding of a mobile platform for payments of electrical vehicle charging. Developed the back end of the mobile app using Django Framework via Python.

Research Intern at SOR Lab, Seoul National University, Korea
July 2020 — September 2020

• Security Optimization Research lab of Seoul National University Department of Electrical and Computer Eng., researching malware detection through AI algorithms.

• Researched dynamic detection of malware application upon instruction stage in virtual machine by coding a Python algorithm using Intel Pin tool to extract the instruction set of the active malware to use as data to train for malware detection hidden within PDFs.

PROJECTS

4th Year Final Year Project
October 2022 — July 2023

Intelligent algorithms for DNA detection using state-of-the-art transformer models for processing time-series loop-mediated isothermal amplification (LAMP) data.

IBM AI Watson Pet
May 2022 — July 2022

• Designed an AI Pet capable of interacting with its user to target social isolation.

• Utilised IBM Watson and speech-to-text to develop a conversation and action flow allowing the user to interact with the pet using voice controls.

• Connected Watson Pet to social APIs such as Spotify, YouTube, and Google Calendar to the pet using Python, granting easy access to modern technology.

C90 Compiler
January 2021 — March 2021

• Developed C to MIPS compiler including local variables, arithmetic & logical expressions, if-else statements, while-loops, for-loops, recursive functions, and more.

• Implemented the lexical analyser and regular expressions using Flex, parser using Yacc, and the abstract syntax tree using C++ to create a basic functioning compiler.