LU Cheuk Fung Jeff | Mobile Number: +852 90228843 / +65 84963257 | Email: jefflu707@gmail.com | Linkedin: www.linkedin.com/in/jeff-lu-2a27472b2 | Personal Webpage: https://cfjeff.netlify.app/ | Github: https://github.com/jiffij

EDUCATION

Nanyang Technological University, Singapore Aug 2023 – May 2024

Master of Artificial Intelligence (MSAI)

- CGPA: 4.65/5.0, Highest TGPA: 4.8/5.0

The Hong Kong University of Science and Technology Sep 2019 - Jun 2023

Bachelor of Engineering - BE, Computer Engineering (CPEG)

- Second Class Honor, Division 1, CGPA: 3.293/4.3, MCGA: 3.438/4.3
- **Dean's List** for Semester 2, Academic Year 2022/2023

ACHIEVEMENTS

HKSAR Government Scholarship Fund - Endeavour Merit Award June 2021

- Give recognition to students in the pursuit of excellence in academic.

Best Final Year Project Award - First Runner up Jun 2023

- A Healthcare Mobile App for Patients – Dr. UST

PROJECT

Best Final Year Project – Dr. UST

- Dr. UST is a groundbreaking telemedicine app, leveraging machine learning for efficient skin lesion diagnosis, enhancing accessibility for both medical staff and patients, particularly valuable during pandemics.

Image Panorama

- It is an implementation of Image-Panorama build from scratch using only NumPy. The algorithm basically includes Fast + Brief + Homography + RANSAC.

Trust Prediction

- This is an implementation of trust prediction by elevating self-evolving multilayer perceptron (seMLP), from scratch, on Capitaland Ascendas REIT prediction.

CSWin SlidingWindow

- This project introduces an alternative approach to the CSWin Transformer. The original model employs a Cross-Shaped Window self-attention mechanism and Locally Enhanced Positional Encoding (LePE). Our version enhances the multi-head attention mechanism by integrating a sliding window self attention mechanism method and increasing the number of splits, aiming to refine the attention process and boost efficiency.

PlantTraits prediction

- In this challenge, we build a VIT-MHA ensemble model for participating the PlantTraits2024 Challenge. The goal of the challenge is to predict the 6 plant traits most accurately. We ranked top 10% in Kaggle Leaderboard by the time of submission.

Personal Identity Information (PII) Classification

- I modified the architecture of the SHA-RNN model and leverage MobileBERT to classify Personal Identity Information (PII).

*** Feel free to explore my personal webpage and GitHub for more details of projects I have done**

WORK EXPERIENCE

Information Technology Service Center (ITSC) in HKUST 06-2022 - 06-2023

Programmer

- Involved in building a facial recognition door lock system for the entire campus. My duties include a facial recognition pipeline (frontend and backend). For instance, building facial recognition model with feature extraction, setting up environment for face recognition with Jetson Nano, raspberry Pi 4 and Rock Chip, NFC card emulation, building connection between frontend and backend, training the face model on the local server side, building an android app for registering face with facial landmark, and controlling door lock system through hardware communication.

HKSAR Census and Statistic Department 07-2021 - 08-2021

- Visit and interview families.
- Record new changes to map.

SKILLS

Language: Cantonese, English, Mandarin

Programming Language: C++, Python, Java, JavaScript, Flutter, React Native, React, NodeJS, Node, R, SQL, HTML, Linux Shell script

Tools: Numpy, OpenCV, Scikit Learn, Tensorflow, Keras, Pytorch, Pandas, NLTK, Gensim, spaCy, Transformers, Three.js, Flask, Socket.io, Firebase, OpenGL, Lucene, etc.

Mathematics: algebra, calculus, statistics, and probability, etc.

Data Analysis & Processing

Familiar with Machine Learning Architectures: MLP, CNN, RNN, KNN, Transformer, Auto-Encoder, GAN, RL, SVM, etc.

Frontend and backend development (Web and mobile application)

HOBBIES & INTERESTS

Travelling, Sports (Swimming, Bowling, Body Building), Sculpting, Building Programs