

ANDREW MARK

AI Developer

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Summary

A highly proficient Deep Learning Engineer with +5 years of practical experience in machine learning (ML) and deep learning (DL). Proven track record of developing and implementing complex algorithms and models to solve real-world problems. Proficient in AI frameworks such as TensorFlow, and PyTorch. Experienced in working with large datasets, designing and implementing neural networks, and optimizing models for performance improvement. Strong background in computer vision, and natural language processing. Recent research about Emotion Recognition from Video (for RAVDESS DATASET). Be familiar with using CNNs, RNNs, Transformers and GANs.

Skills

Python • Tensorflow • Pytorch • Scipy • Scikit • Numpy • Pandas • Jupyter • Java • C++ • Git

Experience

Publicis Groupe

Hong Kong

AI Developer

05/2020 - 05/2023

Publicis Groupe is a global advertising and marketing agency that offers a range of services, including media planning and buying, creative development, and digital marketing. The company has a strong presence in Hong Kong and works with a wide range of clients across various industries.

- Proposed a new **Feature Extraction Method** that combines AUs (Action Units) and Landmarks so that upgraded classification efficiency 0.15%.
- Developed a **Facial Emotion Recognition** model as a collaboration of Bi-LSTM, Attention, MLP and achieved 62.13%.
- Finetuned the transformer model so that could fit to **Speech Emotion Recognition** case and achieved 81.82% accuracy.
- Developed the **Speech Enhancement System** (UNet and LSTM integration) to enhance SER system accuracy and achieved +0.24% accuracy improvement.
- **Integrated** FER and SER and achieved 84.5% accuracy and deployed it.
- Developed **Super Resolution Using** GAN.

Tai Tong Organic EcoPark

Hong Kong

Junior AI Developer

07/2018 - 04/2020

Tai Tong Organic EcoPark is an organic farm located in Yuen Long, New Territories. The farm offers guided tours, workshops, and educational programs on organic farming and sustainable living. Visitors can also pick their own fruits and vegetables, such as strawberries, tomatoes, and sweet corn.

- Developed AI based **Leaf disease detection system** that improved agricultural efficiency by 12%.
- Developed **Human recognition with mask** to deal with COVID-19 crisis and achieved +98% detection accuracy.
- Responsible for **Leadership** of AI developing team that has 12 members.
- Designed and implemented several games including Tetris based on **Reinforcement Learning** (detailed: Actor-Critic Method) and deployed it on the local company website.

Education

Hong Kong University of Science and Technology

Bachelor of Science in Artificial Intelligence Engineering

2014 - 2018

Interests & Hobbies

Reading books

Basketball

Singing

Arena Games especially DOTA