

Jay Chu (楚杰)

Full Stack | AI / ML Engineer

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EXPERIENCE

Qupital — *Artificial Intelligence Engineer*

2022.3 - 2024.8

- Designed and implemented a product recommendation system using ChatGPT, a natural language processing (NLP) model, to generate personalized product recommendations for users based on their preferences and purchase history, resulting in increase in user engagement and satisfaction, with a measured improvement of 35%
- Developed an online chatbot using the ChatGPT Turbo 3.5 model to improve customer engagement and supported on the company's social site, resulting in a 40% increase in user satisfaction
- Trained PyTorch and Tensorflow models to enhance natural language processing (NLP) functionality, resulting in a 25% increase in accuracy of NLP models, and integrated the models with back-end systems using RESTful APIs, enabling seamless data exchange between systems and improving overall system efficiency by 30%
- Developed a blog title generator using machine learning algorithms to generate engaging and SEO-friendly blog titles, resulting in a 40% increase in click-through rate and user engagement
- Developed a web scraping engine using Python and BeautifulSoup to extract data from various websites and build a comprehensive dataset for the company
- Developed and deployed an advanced image generator using stable diffusion to produce high-quality images for various applications, resulting in improved user experience and increased revenue for clients

Xenyo — *Machine learning Engineer*

2018.5 - 2022.2

- Proposed a new Feature Extraction Method that combines AUs (Action Units) and Landmarks so that upgraded classification efficiency 0.15%

SKILLS

Program language

C/C++, Python, Java
JavaScript, R, Julia, SQL

Deep Learning Frameworks

TensorFlow, Pytorch, Keras,
Caffe, Theano, DL4J,
Scikit-Learn, ONNX

Full Stack Web Frameworks

React, Django

Computer Vision

OpenCV, OpenFace

NLP Frameworks

NLTK, SpaCY, Gensim,
TextBlob, Transformers,
LangChain

LLMs

Chatgpt 3.5/4, LLama2,
Langchain

Data Processing

Pandas, Numpy, Scipy,
639386595228PySpark,
Xarray

Data Visualization

Tableau, Matplotlib, seaborn,
matlab

Cloud Platforms

AWS, GCP, Vertex AI, Lambda
Cloud

- Developed a Facial Emotion Recognition model as a collaboration of Bi-LSTM, Attention, MLP and achieved 62.13%
- Fine-tuned 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
- Developed Human recognition with mask to deal with COVID-19 crisis and achieved +98% detection accuracy

Tai Tong Organic Eco Park — *Junior Full Stack ML Engineer*

2017.5 - 2018.4

- Developed AI based Leaf disease detection system that improved agricultural efficiency by 12%
- Responsible for Leadership of AI developing team that has 12 members
- Upgraded the Company landing website
- Designed and implemented several games including Tetris based on Reinforcement Learning (detailed: Actor-Critic Method) and deployed it on the company website

EDUCATION

The University of Hong Kong, — *Bachelor's Degree in Computer Science*

2013. 4 - 2017.4