Edward (Ying-Lun) Cheng

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EDUCATION

University College London (UCL)

London, UK

MSc Machine Learning (First-Class Honours)

2021-2022

• Modules: Supervised Learning, Machine/Robot Vision, Natural Language Processing, Data Mining, Applied ML

University College London (UCL)

London, UK

BEng Electronics & Electrical Engineering (First-Class Honours)

2018-2021

Modules: Machine Learning, Intelligent Systems, Mathematical Modelling and Analysis, CNN/CycleGAN final project.

EXPERIENCE

CYENS

London, UK

Deep Learning Intern

Jun 2022- Sep 2022

- Implemented building detection using U-net based on TensorFlow and across 3 dataset to ensure consistency of model.
- Increased performance by 1 2% (metric used: Intersection over Union).
- Introduced an unique (not found in any of 30+ references reviewed, approved by supervisor) data augmentation technique (boundary addition) and post-processing (fake positive erosion).

PROJECTS

Stock Trading Strategy based on Moving Average/XGBoost/LSTM

Jan 2023 – Feb 2023

- Researched and improved a trading strategy outperformed DCA by 84% (backtesting period ranged from 6 months to 6 years).
- Analysed and visualised the results (over 3 types of graphs to best represent different scenarios) for clear presentation.

Fake Review Generation and Classification via Large Language Models

Mar 2022 - Apr 2022

- Built a SOTA level fake review classifier (91% accuracy) with sklearn pipeline.
- Developed a GPT-2 based review generator. Outperformed SOTA classifier, reducing the classification rate from 91% to 51%.

Emotional Voice Conversion

Nov 2020 - Apr 2021

- Extended PyTorch CNN models and TensorFlow CycleGAN models. Achieved 2 deep learning voice conversion models that improves the Mel-cepstral distortion score by 13.4%.
- Self-taught most materials and topics required, including CNN, CycleGAN, Mel Spectrogram, parallel and non-parallel training, etc. Graded A by several academic supervisors.

Monthly Engineering Challenges

Sep 2018 - Apr 2021

- Led teams of 4-7. Managed cross-functional teams to deliver projects on time and meet objectives.
- Provided support to both software and hardware teams (Arduino, Python, circuit design, etc.).

PUBLICATION

Lin, M.Y.C., Nguyen, T.T., **Cheng, Edward Ying-Lun**, Le, A.N.H., and Cheng, J.M.S. (2023), "Proximity marketing and Bluetooth beacon technology: A dynamic mechanism leading to relationship program receptiveness", *Journal of Business Research*, 141, 151-162 (2021 SSCI IF: 10.969, JCR in Business 17/154, Q1).

CERTIFICATE & COURSE

Machine Learning Engineering for Production (MLOps) Specialization (DeepLearning.A1)	Aug 2023
AWS Fundamentals Specialization (AWS)	Aug 2023
DeepLearning.AI TensorFlow Developer (DeepLearning.AI)	Jul 2023
Full Stack Deep Learning (UC Berkeley)	Apr 2023

ADDITIONAL EXPERIENCE

University Representative Assistant

Tainan, Taiwan

2022

UKEAS (Study world spring exhibition)

Feb 2021 - Mar 2021

Ensured seamless communication between students and UK universities, resulting in 12 student sign-ups for orientation.

Physics Tutor

Tainan, Taiwan

Self-employed
 Tutored high school physics. Student was accepted by Department of Electrical Engineering, National Taiwan University.

Physics Student Representative

London, UK

University College London (UCL)

Sep 2017 – Jun 2018

• Gathered, organised, and presented feedback from over 100 students. Re-designed remaining 3 coursework with professors.

SKILLS AND INTEREST

Technical skills: Python (scikit-learn, TensorFlow, PyTorch, NumPy, pandas, Matplotlib), MLOps (GitLab CI/CD, git, docker), AWS, Cloud, computer vision, Excel, MATLAB, HTML, CSS, MySQL, LATEX, Multisim, RoboDK.

Languages: Mandarin (Native), Taiwanese Hokkien (Native), English (Fluent).

Interests: UCL badminton team, calligraphy, photography, go chess.