WORK EXPERIENCE

Lead Machine Learning Engineer - Deep LearningAbingdon HealthJan 22-PresentMachine Learning Engineer - Deep LearningAbingdon HealthFeb 21-Dec 21

- Co-designed AppDx® (patent), a multi-stage deep learning algorithm for reading rapid diagnostic tests.
- Led technical direction of ML engineering and applied research for the AppDx® product (£1m funding).
- Trained, evaluated, and deployed image recognition and object detection models; curated training data.
- Technologies: Python, TensorFlow (TF Lite for production), Sklearn, Weights & Biases, Docker, Azure.

Equity Research Analyst - Product Management Exane BNP Paribas Sep 16-Aug 19

- Managed the Exane Research pipeline, collaborating with 100 Analysts; chaired the Morning Meeting.
- Won first place in European Equity Sector Research in the 2017, 2018, and 2019 Extel investor surveys.

Equity Analytics Analyst - Alpha Generation Libra Investment Services Sep 13-Sep 16

- Analysed the daily output of the Apollo® times series asset pricing model to identify mispriced stocks.
- Won Man AHL's top broker award and a £0.4 million cash prize for Apollo-generated trade ideas (2015).

PROJECTS

MSc AI Individual Project

2020

- Developed an input splitting algorithm for verifying deep neural networks; used integer programming.
- Achieved a 2-3x certification speedup on MNIST and CIFAR-10 models vs. traditional bisection (thesis).

MSc AI Group Software Engineering Project

2020

Built a GUI in Python for performing 3D landmark detection with reinforcement learning agents (demo).

Data Science PhD Interview Project

2020

• Built a web app for news summarisation and entity extraction; used Hugging Face and Streamlit (<u>code</u>).

C460 Deep Learning Project

2020

• Researched and implemented CNN, RNN, GRU, LSTM, VAE, and GAN architectures in PyTorch (code).

EDUCATION

MSc Artificial Intelligence, Imperial College London, Merit
BSc Physics, University of York, First Class Honours
2019-2020
2010-2013

QUALIFICATIONS & AWARDS

Level II, Chartered Financial Analyst (CFA) Program
Runner-Up, Goodwin Project Prize, York Physics (100 students)
2015, 2018
2013

VOLUNTEERING

The Access Project 2020

• Delivered A-level Maths tutorials and worked with a disadvantaged student to achieve an A-grade.

COMPUTING

Python, Bash, MATLAB, HTML, TensorFlow, PyTorch, Sklearn, Gurobi, W&B, Docker, Git, Azure