Rudy C. Yuen

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ABOUT

Sell-Side Front Office Quant with strong background in Mathematics and Computer Science specialised in Machine Learning and Statistics.

EXPERIENCE

Nomura International Plc

London, UK

eFX Quant Analyst

Commencing July 2024

• Return Offer Extended from Summer Internship.

University College London

London, UK

Research Assistant (Part Time) - Innate2Adaptive Labs

May 2024 - Current

• Extending research work from my MEng dissertation for journal publications.

Undisclosed Corporation

Hong Kong

Digitalisation Consultant

Sep 2023 - Feb 2024

- Fine Tuned RLHF variants of Llama-2 using AWS Sagemaker to research into applying Generative LLMs into daily operations.
- Details generalised due to an NDA.

Nomura International Plc

London, UK

eFX Quant Summer Analyst

Jun 2023 - Aug 2023

- Developed Data Visualisation Libraries for backtesting and calibrating FX Pricing Models with Python.
- Investigated impacts of static stop losses and widening spread on trading volume and PnL with Python.

University College London

London, UK

Undergraduate Teaching Assistant

Sept 2022 - Dec 2022

• Provided support sessions to 25+ amateur coders in the Department of Computer Science on coding.

EDUCATION

University College London (UCL) — London, UK

2020 - 2024

 MEng (Hons) — Mathematics and Computer Science

Predicted: First Class Honours

Dissertation: Multi-Instance Transfer Learning on T cell receptor LLMs for Cancer Prediction

 $Related\ Courses\ \&\ Grades:\ Algorithms\ (75.80\%);\ Algebra\ (88.10\%,\ 92.00\%,\ 79.45\%);\ Calculus\ (83.40\%,\ 78.90\%);\ Probability\ and\ Statistics\ (72.50\%,\ 74.54\%);\ Stochastic\ Calculus\ (70.16\%);\ Machine\ Learning\ (85.75\%,\ 84.15\%,\ 88.50\%,\ 100.00\%)$

PROJECTS

On the choice of T cell receptor encoding for cancer prediction

May 2024 - Ongoing

• Extending my dissertation with an aim for publication.

Multi-Instance Transfer Learning on T cell receptor LLMs for Cancer Prediction

Jun 2023 - Apr 2024

 $Project\ Link:\ {\tt https://github.com/RcwYuen/TCR-Cancer-Prediction}$

- Achieving state-of-the-art AUC (100%) in identifying Stage I-IIIa NSCLC using peripheral T cell receptors.
- Demonstrating with novelty that LLM embeddings are more effective than physico-chemical encodings in representing T cell receptor CDR3s.

Exploration of Gender Biases in Modern Machine Translation Models

Jan 2024 - Apr 2024

 ${\it Project\ Link:}\ {\tt https://github.com/RcwYuen/ucl-comp0087-snlp-cw}$

- Researching into gender biases in MBart, NLLB-200 and M2M-100 using PyTorch.
- Creating a dataset based on prompt engineering with aim to detect gender bias.

Multilayer Perceptron from Scratch

Project Link: https://github.com/RcwYuen/java-mlp-no-imports

Dec 2023

• Developing from scratch a multilayer perceptron in Java.

SKILLS

- Programming: 8+ years of experience in Python, experience with Java, SQL & Haskell. Recently learning KDB/Q+.
- Tools and Libraries: PyTorch, Matplotlib, NumPy, SciPy, Pandas, Scikit-Learn, LATEX, Microsoft Excel