WU YITONG

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EDUCATION

MSc Financial Technology, Nanyang Technological University, Singapore
- Cumulative GPA: 4.20/5
- Core Modules: Machine Learning in Finance, Finance and Risk Management, Quantitative Methods in Finance, Anti-Financial Crime, Python For Data Analysis

BSc Mathematics with Economics, University College London, United Kingdom
- Qualification Awarded: Upper Second-Class Honours
- Core Modules: Linear Algebra, Analysis, Financial Mathematics, Economics, Financial Economics

WORK EXPERIENCE

Research Assistant, National University of Singapore, Singapore   **Dec 2023-Dec 2024**
- <u>R Package Development</u>: Led the creation of the R package *catalytic* as the first author, incorporating advanced Bayesian methodologies, and co-authored a related paper.
- <u>Research and Innovation</u>: Enhanced GLM binomial predictions using `rstan`, reducing logarithmic error fivefold, and analyzed Catalytic priors for GLM and Cox regression models.
- <u>Time Management and Independence</u>: Independently managed tasks, met deadlines, and maintained clear communication through detailed documentation and milestone tracking.

Data Engineer, Oversea-Chinese Banking Corporation, Singapore   **Jul 2022-Aug 2023**
- <u>Automated Trade Reconciliation</u>: Built the Trade Automation Smart Process Robot, reducing trade reconciliation time from 40+ minutes to under 1 minute per trade for 1,500+ daily trades error-free.
- <u>System Optimization</u>: Designed Python-based tools for efficient data extraction, comparison, and reporting across various document formats. Migrated systems to Jenkins and introduced PyTest, achieving 80% test coverage.
- <u>Business Analysis and Development</u>: Worked closely with clients in a lean team to gather requirements, analyze needs, and propose solutions. Prepared As-Is/To-Be documentation, managed the DEV, UAT, and PROD phases, and ensured alignment with client timelines and expectations.
- <u>Collaboration and Mentorship</u>: Coordinated with stakeholders to define project goals and mentored interns, enhancing team productivity.
- <u>Recognition</u>: Received *LinkedIn recommendations* from manager and client for exceptional contributions to trade automation and client engagement.

Data Scientist, Singapore Telecommunications Limited, Singapore   **Jan 2022-Jun 2022**
- Clustered and labelled ~100,000 customers with PySpark to enable a new sales structure.
- Analyzed churn behavior using Lifelines, providing actionable insights for management.

University Python Mentor, University College London, United Kingdom   **Oct 2019-Jun 2020**
- Developed and delivered coding lessons for underprivileged children.

RELATED PROJECTS AND EXPERIENCES

Equity Price Analytics, NTU, Singapore   **Jan 2022-Feb 2022**
- Developed coding structures to generate long-short equity pairs for Pairs Trading strategy by using Simple and Exponential Moving Averages.

NLP in Toxic Comment Classification, NTU, Singapore   **Oct 2021-Feb 2022**
- Remodelled machine learning methods, such as LSTM, to enhance efficiency and accuracy in toxic comment classification compared to Logistic regression models.

Car Rental Blockchain Smart Contract, NTU, Singapore   **Dec 2021-Jan 2022**
- Designed a smart contract using Solidity to execute the daily functions of car rental companies.

Machine Learning in Human Facial Expression Recognition, NTU, Singapore   **Jul 2021-Oct 2021**
- Built facial recognition models using PyTorch and scikit-learn, achieving 76% accuracy.

Cryptography Simulation Project, UCL, United Kingdom   **May 2019-Jun 2019**
- Simulated and presented Diffie-Hellman key exchange methods for encryption and decryption.

SKILL & INTERESTS

IT Skills:
- Major: Python (PyTorch, Pandas, PyTest, etc), R (stats, rstan, testthat, devtools, etc), SQL
- Others: Git, AWS, Jenkins, Jira, Bitbucket, Confluence, UML, Cucumber, HTML, CSS, JavaScript

Language: Mandarin (Native), English (Fluent), Japanese (JLPT N2)

Interests: Sudoku, Bodybuilding, Bread Making, Hiking, Travelling (UAE, Sri Lanka, Maldives, etc)