Tsz Yin **Yung**

ANALYST AT RBC CAPITAL MARKETS, MENG MECHANICAL ENGINEERING AT IMPERIAL COLLEGE LONDON

Aldgate, London

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Education

Imperial College London
London, U.K.

MENG IN MECHANICAL ENGINEERING
Oct. 2019 - Jun. 2023

- Graduated First Class with Honours. Recipient of The Imperial Award (2022).
- Dissertation: Predicting Charpy Impact Energy from Microstructure Data of A508 steel with Machine Learning
- Relevant Courses: Maths & Computing, Machine Learning, Statistics

Victoria Shanghai Academy (VSA)
Hong Kong

INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAMME
Aug. 2007 - Jun. 2019

- Achieved 44 out of 45 (Top 0.78% Globally)

Work Experience

RBC Capital Markets
London, U.K.

REGULATORY REPORTING SOFTWARE DEVELOPER, QUANTITATIVE TECHNOLOGY SERVICES
Apr. 2024 - Present

- Proactively developed a cross-platform Python automation tool integrating JIRA and Git APIs to reduce daily spreadsheet check-ins across 5 repositories from 30+ manual steps to a single command, saving the team 5+ hours weekly.
- Implemented execution status tracking for regulatory trade response flows, enhancing the monitoring and processing capabilities for 10+ reported trade flows processing 200,000+ trades per day.
- Upgraded error persistence features with Solace pub/sub architecture to support error tracking and logging, facilitating debugging and system maintenance and reducing average debugging time by 50%.

STRUCTURED RATES IT PYTHON DEVELOPER, QUANTITATIVE TECHNOLOGY SERVICES
Nov. 2023 - Apr. 2024

- Created FX Forwards, Deposits and Credit Default Swap products for internal Structured Rates booking and portfolio management platform.
- Adopted test-driven development for application features and fixing Jira backlog tickets. Implemented unit and integration tests with pytest and unittest to ensure code reliability.

FRONT OFFICE PROCESS ENGINEERING ANALYST, QUANTITATIVE TECHNOLOGY SERVICES
Jul. 2023 - Nov. 2023

- Pioneered and deployed a Python-based software system to automate termsheet reviews for Short Term Enhanced Government Bonds (STEGs), reducing manual verification time by 95%. This saved an average of 3 hours per day, translating to monthly cost reductions of £5,000.
- Onboarded and deployed new FX Futures batches to production as part of daily batch processing runs, supporting the FX Forwards business.
- Automated the FX supergranular market data publication process for the Global FX desk. The process ensured 100% timely batch execution, improving the reliability of FX operations.

FX ETRADING SUMMER ANALYST, QUANTITATIVE TECHNOLOGY SERVICES
Jun. 2022 - Aug. 2022

- Developed an automated trade reconciliation system with kdb+/q for forex execution algorithms to identify position breaks. This system analyzed over 100,000 orders from historical and real-time trade databases, facilitating a 80% reduction in errors related to position discrepancies.
- Analyzed order execution report data with Excel, to validate implementation of algorithmic trading strategies.
- Created procedures for order execution visualization and cross currency triangulation trade analysis to support algorithm development.

Environmental Resources Management (ERM)
Hong Kong

RISK & SAFETY CONSULTING INTERN
Jun. 2021 - Sep. 2021

- Conducted Quantitative Risk Assessments (QRA) for developments surrounding liquified petroleum gas terminals and chlorine storage facilities, identifying and mitigating 10+ potential hazards for compliance with industrial safety standards.
- Designed comprehensive methodology for 3D digital terrain mesh reconstruction from LiDAR point cloud data, improving topographical accuracy for dispersion modelling.

Self Employed
Hong Kong

MATH, PHYSICS & SAT TUTOR
Jun. 2019 - Sep. 2021

- Tutored 8 high-school students in mathematics, physics and SAT preparation, with a student scoring 1550 out of 1600 on the SAT.
- Delivered personalized lesson plans tailored to individual learning styles, leading to a 100% satisfaction rate among students and parents.

Skills

Skills: Python, Java, SQL, Kdb+/q, MongoDB, VBA, LaTeX
Tools: Git, Helios, Docker, Kubernetes, Solace, Swagger, Jira, Confluence
Processes: Agile, Scrum, Unit Testing
Interests: Selfhosting, Chess, Photography
Languages: English, Cantonese, Mandarin