Tsz Yin **Yung**

Analyst at RBC Capital Markets, MEng Mechanical Engineering at Imperial College 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
  - Libraries: numpy, pandas, tensorflow, scikit-learn, matplotlib, seaborn
- 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 Java Developer, Quantitative Technology Services — *Apr. 2024 - Present*

- Updated existing APIs and systems with Java and Spring Boot to comply with MIFID PTT and ESMA EMIR refit reporting rule changes.
- Implemented execution status tracking for regulatory trade response flows, improving ability to monitor processing status for reported trades.
- Developed error persistence features with Solace pub/sub architecture to support tracking and logging errors, facilitating debugging and system maintenance.

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*

- Developed and deployed a Python-based software system to automate termsheet reviews for Short Term Enhanced Govies (STEG), reducing manual verification time by 95%, saving 2 hours/day and enabled significant cost reductions for Structured Products Business Support.
- Onboarded and deployed new FX Futures batches to production as part of daily batch processing runs, supporting the FX Forwards business.
- Contributed to automating the process of FX supergranular market data publication for the Global FX desk.

FX eTrading Summer Analyst, Quantitative Technology Services — *Jun. 2022 - Aug. 2022*

- Developed automated trade reconciliation system with kdb+/q for forex execution algorithms to identify position breaks, extracting insights through analytic methodologies from historical and real-time trade databases containing over 100,000 orders.
- Analyzed order execution report data to validate appropriate implementation of algorithmic trading strategies with Excel.
- 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*

- Produced Quantitative Risk Assessments (QRA) for developments surrounding liquified petroleum gas terminals, chlorine storages at water treatment works, and high-pressure pipelines.
- Designed comprehensive methodology for 3D digital terrain mesh reconstruction from LiDAR point cloud data.

Self Employed
Hong Kong

Math, Physics & SAT Tutor — *Jun. 2019 - Sep. 2021*

- Tutored high-school students in mathematics, physics and SAT, with a student achieving a SAT score of 1550 out of 1600.
- Translated complex technical topics into simple concepts, and supported students with personalized lessons.

Skills

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