

KAI WEN TAY

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EDUCATION

The University of Chicago

Master of Science in Financial Mathematics

Chicago, IL

Expected Dec 2024

- Courses: Portfolio Theory & Risk Management, Python for Finance, Option Pricing, Algorithmic Game Theory

University of London

Bachelor of Science in Banking & Finance

Singapore

Aug 2020

- Courses: Microeconomics, Elements of Econometrics, Quantitative Finance, Asset Pricing & Financial Markets
- Awards: Letter of Commendation for Excellent Performance 2018

SKILLS

Computing: Python, Jupyter, VBA, Tableau, PowerBI, Bloomberg, FactSet, Refinitiv, MS Office

Knowledge: Statistical Modeling, Data Analytics, Dashboard Development, Derivatives, Project Management

Languages: English, Chinese (Mandarin)

EXPERIENCE

DBS Bank Ltd

Singapore

Senior Associate, Specialist - Equity Structured Products

Mar 2023 – Aug 2023

- Developed Equity & Fund derivative strategies (SPs, OTCs, Hybrids, Exotics, QIS) for buy-side distribution
- Led project team to build portfolio advisory tool, allowing for effective structured product lifecycle management & aggregate credit rating analysis
- Developed tactical derivatives tracker via Python to monitor performance & uptake of trade recommendations
- Executed/monitored key restructuring and hedging trading strategies to ensure proper order execution and risk management

Associate, Specialist - Equity Structured Products

Mar 2022 – Feb 2023

- Innovated various niche trade recommendations that generated more than \$500M in trade volume
- Developed Python scripts to manage counterparty risk & trading seasonality on client books, enabling the bank to shift risk from distressed issuers and smoothen cash deployment
- Developed control tower dashboard via Tableau to funnel options trade data into simple, interactive visuals, allowing team to react to and reduce risk of structures delivery by more than 50%

Analyst, Specialist - Equity Structured Products

Oct 2020 – Feb 2022

- Built and used backtesting tools via Python to evaluate historical performance of exotic derivatives relative to key factors (e.g. interest rates, market volume), reducing testing turnaround time by more than 90% for key products
- Spearheaded the first extract, transform, load (ETL) data migration process to move transaction & position data from multiple disparate sources to a cloud warehouse for easy querying
- Created key automation tools that ran the entire process of pricing derivatives, and calculating potential returns
- Developed key data tables via SQL post-migration to be used for data-driven risk management & trade ideation

PROJECTS

Weighted Majority Algorithm – Combining Expert Advice

- Investigating the performance of different Weighted Majority Algorithms and Greedy Algorithms for combining expert advice in the context of 13F filings [\[Link\]](#)

Pair Trading Strategies on Semiconductor ETFs

- Applying a cointegration strategy on the two ETFs SOXL and SOXX to see if there is potentially a viable and executable cointegration. [\[Link\]](#)

ACTIVITIES

University of London – Singapore Institute of Management

Singapore

Peer-Assisted Learning Leader

Mar 2021 – Aug 2021

- Organized & conducted teaching sessions for Principles of Banking & Finance modules for students in groups of 10.