Xu Yaxuan

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EDUCATION BACKGROUND

National University of Singapore   **2022.08-**
- **Major:** Quantitative Finance (Msc) CAP: 5.0/5.0
- **Main Courses:** Stochastic Analysis, Structured Product, Financial Derivatives

Central University of Finance and Economics   **2018.09-2022.06**
- **Major:** Financial Engineering (Bachelor of Economics) GPA: 91.92/100
- **Main Courses:** Financial Risk Management, Securities Investment
- **Honors:** 2018-2019&2019-2020 Academic Merit Scholarship of CUFE (2019.10, 2020.10)

INTERNSHIP EXPERIENCE

Barclays Corporate & Investment Bank, Rates Option Trading Summer Intern   **2023.06-**
- Developed a -Gamma strategy back testing tool with daily delta hedge and weekly unwind among USD/JPY/AUD across different expiry and tenor with different strike. Applied stress test and drawdown analysis before and after events also carried out the back testing with transaction cost where the swaption and hedge trades are charged based on volatility and dv01 respectively.
- Derived market implied distribution of the at the money forward based on volatility surface and further concluded skew trade view.
- Built a cross-currency fixed-float swap auto pricing tool including decomposing the product into 3 legs, overriding the market with specific funding curve, giving the reference market rate and further carried out the pricer automatically in spreadsheet.
- Amended the trading book risk position sheet to change data source and made adjustments to the libor transfer.

Asian Institute of Digital Finance, Credit Research Initiative, Research Analyst   **2022.10-2023.04**
- Implemented a framework for constructing probability of default (PD) and distance to default (DTD) using a combination of reduced-form and structural models, which involves utilizing forward probabilities of default and other exit strategies as key components to construct the PD term structure.
- Collaborated with the team to assist in the model calibration process, including parameter switches, data revisions, and historical refreshes on a monthly basis.

China International Capital Corporation (CICC), Fixed Income Department Intern   **2022.03-2022.06**
- Conducted quantitative strategy back testing independently, utilizing the cGAN method in deep learning to obtain future yield distributions, and implementing the risk parity model to allocate assets across commodities, stocks, and bonds. Completed a detailed strategy report outlining the findings.
- Assisted in maintaining comprehensive records of USD bond total return swaps, and regularly executed confirmation orders for both the client side and trading desk side. Organized index roadshow materials and reports and produced charts using software like Tableau to visualize index performance.

CDH Investment, Operation Intern   **2021.07-2021.12**
- Assisted the IPO sci-tech's new shares investment, including reporting relevant materials and adjusting the financial model based on DCF and PE valuation methods. Independently completed the investment report, ensuring it was thorough and accurate.
- Processed index underlying documents, delivery orders, and valuation tables and further built secondary tables in the database based on the underlying data and conducted position checks to ensure accuracy.

Industrial and Commercial Bank of China, Quantitative Analysis Intern   **2021.03-2021.06**
- the leading period of indicators and utilized a synthesis method to construct economic leading index, financial conditions index, CPI leading index, and PPI leading index. Constructed stock portfolios based on styles using both "a la carte" and "integrated" methods and compared the market performance of each.

ACADEMIC EXPERIENCE

Academic Research: A Theoretical Model of the Economic Impact of Novel Coronavirus   **2021.05**
- Published on *Journal of Tianjin University (Social Science Edition)* **(**which is the source journal of *Core Journals* of *Chinese Humanities and Social Sciences* and *Chinese Core Journals (Selection) Database***),** 07.2021, Vol. 23, No. 4, Article No. :1008-4339（2021）02-129-07
- Designed a theoretical model to study the variation of isolation and treatment costs over time for the Novel Coronavirus epidemic, and analyzed how the intensity of government isolation measures would affect isolation and treatment costs from a macro perspective; used MATLAB to numerically simulate the epidemic data in major Chinese provinces to provide reference *for the government to design optimal policies.*

EXTRACURRICULAR ACTIVITIES

Volunteer Service Activities: Accumulating for 70+ hours   **2018.09-2020.12**

SKILLS AND INTERESTS

Computer skills: Python, Matlab, C++, R, Julia, Microsoft Office, VBA
Interests: Latin poetry