YONGYAO CHEN, FRM

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EDUCATION

Expected 12/23 **NEW YORK UNIVERSITY** New York, NY
The Courant Institute of Mathematical Sciences
M.S. in Mathematics in Finance

- ***Coursework:*** market microstructure, trading energy derivatives, risk and portfolio management, equity derivatives, dynamic pricing, scientific computing, algorithmic trading, stochastic calculus

08/16 - 06/20 **NANYANG TECHNOLOGICAL UNIVERSITY** Singapore
B.ENG. in Electrical and Electronic Engineering ***(Honors, Highest Distinction)***

- ***Coursework:*** linear algebra, probability & statistics, numerical methods, differential equations, data structure & algorithms, intelligent system design, business finance, accounting fundamentals

02/18 - 07/18 **ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE (EPFL)** Lausanne, Switzerland
Semester Exchange with Scholarship

EXPERIENCE

MORGAN STANLEY Hong Kong SAR
06/23 - 08/23 **Summer Associate, Quantitative Research** (Equity Algorithmic Electronic Trading)

- Researched smart meta algos for intra-order algo selection and switching at IED MSET desk
- Reconstructed historical order trading micro-process and built automated daily reporting pipeline in production environment to provide trading visualization and performance analytics
- Designed simulation framework that integrates production model and local state machine proxy to replay existing orders and experiment on new intra-order algo switching strategies
- Proposed new meta algo models based on intraday momentum and reversion effect as well as evidence from simulations; achieved arrival cost optimization and tail risk control

JPMORGAN CHASE & CO. Singapore
09/20 - 07/22 **Analyst, Software Engineer** (Asset and Wealth Management)

- Created data-centric investment technology that facilitates portfolio management and trading decisions for private bank's internal investors and financial advisors
- Contributed to development of new global strategic data framework that consolidates and processes data from all accounting systems, using big data, cloud, and automation technologies
- Expanded portfolio analytics space with new features (e.g., trending trades analysis, large cash position indicator, overdraft alert, client service communication, morning briefs, trade idea feeds)
- Designed and implemented novel automated monitoring system that surveys data pipelines; it now serves as primary platform for service-line agreement management internationally

06/19 - 08/19 **Summer Analyst, Software Engineer** (Corporate and Investment Banking)

- Collaborated with London commodities team to develop new Python-based software for base metal post-trade customer information maintenance in firm's cross-asset platform, Athena

ERNST & YOUNG SOLUTIONS LLP Singapore
01/19 - 05/19 **Advisory Services Intern**

- Facilitated business design, implementation, and data migration of Sales & Distribution module in largest global SAP S/4HANA ERP project at EY Singapore in 2019 for client, DyStar Group

PROJECT

08/19 - 04/20 **NANYANG TECHNOLOGICAL UNIVERSITY** Singapore
Onboard 3D SLAM for AGV Localization - With Delta Electronics, Inc. (C++, Linux, ROS)

- Designed thematic segmentation system to identify human objects in complex 3D point clouds utilizing anthropometric geometry and support vector machine for automated guided vehicles

COMPUTATIONAL SKILLS / OTHER

Programming Languages: Python, kdb+/q, Unix Shell, Java (Spring), Scala (Hadoop/Spark), C++, SQL
Languages: English (fluent); Mandarin (native); Japanese and French (elementary)
Affiliations/Certifications: Certified Financial Risk Manager (FRM); Passed CFA Exam Level II (November 2021)
Activities: NTU Chinese Orchestra, Two-String Fiddle Performer (Singapore, Taipei); Singapore Marathon (2017, 2019)