YUXUAN WANG

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EDUCATION

NEW YORK UNIVERSITY, TANDON SCHOOL OF ENGINEERING Brooklyn, NY
Master of Science in Financial Engineering Expected 05/23
GPA: 4.0/4.0

XIAMEN UNIVERSITY, SCHOOL OF ECONOMICS Xiamen
Bachelor of Management - International Business 06/20
GPA: 3.7/4.0

CORNELL UNIVERSITY Ithaca, NY
Cornell China Undergraduate Summer Program 07/17

PROGRAMMING & TECHNICAL SKILLS

- **Skills:** Python, C++, MATLAB, SQL, Spark, Wind, Bloomberg

COURSEWORK HIGHLIGHTS

- **Mathematics & Statistics:** Option Pricing and Stochastic Calculus, Stochastic Process, Differential Equations
- **Finance and Economics:** Financial Econometrics (Time Series Analysis), Econometrics, Macro/Microeconomics
- **Programming:** Financial Computing in C++, GPU Computing, Machine Learning, Big Data in Financial Engineering

EXPERIENCE

JP MORGAN CHASE & CO., Jersey City, NJ 06/22 - Present
Quantitative Analytics Summer Associate
- Developing product and account risk mapping model using Python, clustering over 500 thousand accounts into risk groups based on mixed features with Autoencoder and K-means and mapping accounts to products based on risk levels
- Building data visualization programs with Seaborn, Matplotlib and WordCloud to test and review model performance
- Conducting research on risk ranking methodology for different products including equity, fixed income index and derivatives

CITIC SECURITIES, Shanghai, China (Remote) 09/20 - 07/21
Quantitative Research Intern, Quantitative Strategy and Asset Allocation Group
- Enhanced CSI 300 equity index with neural networks and Tensorflow Keras, selecting component stocks using Autoencoder according to 2-norm difference and training shallow neural networks to replicate benchmark and get portfolio frontier
- Developed and combined asset allocation strategies such as carry, momentum as factors; allocated factors with cross-sectional optimization and time series volatility targeting to create allocation model with higher Sharpe ratio
- Constructed nowcasting model of China's GDP based on dynamic factor model with Python which was further utilized by quantitative researchers to predict macroeconomic variables
- Mined outliers in trading volume and price data of China's A-share market with machine learning algorithms and Python PyOD and analyzed performance of stocks around outliers statistically

HUATAI SECURITIES, Shenzhen, China 06/19 - 09/19
Quantitative Research Intern, Financial Engineering Group
- Designed target-date fund's (TDF) glide path based on stochastic differential equations for fund companies; coded in Python to build model and simulate performance of the TDF based on Monte Carlo Simulation
- Constructed and backtested volume-and-price timing strategy on CSI500 with Python, based on financial cycles
- Automated visualization process of Huatai financial cycle recognition model using Python and saved up to 70% time

RESEARCH & ACADEMIC PROJECTS

NYU TANDON SCHOOL OF ENGINEERING, Brooklyn, NY
Parallel Simulation on CPU and GPU, Course Project, NYU Tandon School of Engineering 04/22 - 06/22
- Built simulation programs for barrier and Asian option pricing and other financial models on CPU and GPU with C++/CUDA C
- Implemented MRG32k3a generator, skipping-ahead algorithms and Cholesky decomposition for multi-dimensional parallel simulation; Compared simulation speed of CPU and GPU with increasing number of time steps and simulation paths

Company Bankruptcy Prediction, Course Project, NYU Tandon School of Engineering 10/21 - 11/21
- Created pipeline to clean, transform and oversample imbalanced data with SMOTE through Imblearn and Sklearn; trained LR, Random Forest and GBDT models and designed custom metrics to guide hyperparameter tuning and model selection

XIAMEN UNIVERSITY, Xiamen, China 10/18 - 06/20
Research Assistant, advised by Professor Haiqiang Chen, Xiamen University
- Developed website crawlers with Python Pyspider to get data from online shopping websites, saved over 1 million records into MySQL database and cleaned data by Numpy and Pandas for analyzing price changes during online shopping festivals

HONORS / AWARDS / COMPETITIONS

- **National Scholarship (1%)**, 2019
- **Merit Student**, Xiamen University, 2019
- **China Undergraduate Mathematical Contest in Modeling**, 1st prize in Fujian Contest District, 2018