

Yitong (Wynter) WANG

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EDUCATION

University of Washington

Seattle, WA

Master of Science in Electrical and Computer Engineering

Sept 2024 – April 2026

- **Relevant Coursework:** Database Systems, Mobile Robots, Software Engineering for Embedded Applications

Central University of Finance and Economics

Beijing, China

Bachelor of Science in Applied Statistics

Sept 2020 – June 2024

- **Relevant Coursework:** Python Programming, C++ Programming, Machine Learning, Data Science, Mathematical Analysis, Advanced Algebra, Probability Theory, Mathematical Statistics, Discrete Mathematics, Stochastic Processes, Regression Analysis, Time Series Analysis, Numerical Analysis, Mathematical Modeling and Mathematical Experiment

SKILLS

- **Languages:** Python, R, SQL, Java, C/C++, Shell, JavaScript/TypeScript, HTML/CSS, MATLAB, Latex
- **Frameworks:** PyTorch, Flask, Scrapy, ROS, Scikit-learn, NLTK, NumPy, Pandas, Seaborn, React.js, Node.js, SpringBoot
- **Databases:** MySQL, SQL Server, PostgreSQL, Oracle Database, MongoDB, Redis
- **Dev Tools & Cloud:** Tableau, Spark, Hadoop, Git, Docker, Unix, AWS, Google Cloud, Microsoft Azure

PROFESSIONAL EXPERIENCE

Cisco Systems

Beijing, China

Machine Learning Engineer Intern

Oct 2023 – Apr 2024

- Constructed deep reinforcement learning algorithm **DQN** under **PyTorch** framework to monitor anomalies on large-scale network data recorded by routing devices and analyze network attacks and system operation and maintenance anomalies
- Optimized network anomaly monitoring algorithm using **PPO2**-based model with an accuracy of 92.43% and a precision of 91.68%, improved algorithm performance by about 9.4% and integrated the algorithm into the production system
- Developed and iterated a new version of network devices monitoring and upgrading systems with **Python** and **Java** to fix system issues and ensure the upgrade processes and routine maintenance of routing devices and network switches

Kuaishou Technology

Beijing, China

Data Analyst Intern, Local Life Department

June 2023 – Aug 2023

- Established 20+ dynamic data sets based on business logic and e-commerce operation data with **SQL** and built visualization dashboards with **Power BI** to construct an automated system for data processing, updating and monitoring
- Crawled business performance data from datasets under **Scrapy** framework and preprocessed the data with **NumPy** and **Pandas**, pioneered the automation of generating and modifying periodic data analysis reports with Regular Expression and **Natural Language Toolkit** (NLTK) which improved the efficiency of the team's work by 3+ times
- Examined factors affecting Click-Through Rate (CTR) of live streams through correlation analysis and data visualization, proposed feasible strategies which increased CTR performance by 27% and GMV performance by 20%

CGB Fintech

Beijing, China

Quantitative Research Intern, Artificial Intelligence Engineering Department

Feb 2022 – Apr 2022

- Developed and deployed backtesting infrastructure for trading strategy based on Tushare database under Backtrader framework with Python and implemented risk management to monitor and adjust strategy performance in real-time
- Constructed an end-to-end neural network strategy based on volume and price data of A-share with **Python** which applied deep learning to implement factors mining and achieved 11.58% annualized excess return and 8.27% average Rank IC
- Developed convex optimization neural network layers with **PyTorch** based on **CvxpyLayers** to construct a quantitative investment deep learning model from raw asset data to optimal asset allocation weights
- Crawled and preprocessed 500+ investment related texts of fund companies and carried out sentiment analysis based on **TextCNN** and **BERT** algorithms to propose investment recommendations on specific industries and products

PROJECTS

Development of Cryptocurrency Trading and Backtesting Platform - Python, Flask, REST

Jan 2023 – May 2023

- Developed a platform for real-time trading and event-driven backtesting of cryptocurrency based on the Zipline library using **Python Flask**, enabling users to dynamically execute trades across multiple exchanges such as Binance, OKX and Bitget
- Integrated multiple cryptocurrency exchanges API using **RESTful** and advanced performance analytics tools using QuantPy, providing users with a unified interface for executing trades, monitoring portfolios, and accessing historical market data, which enables them to assess the effectiveness of their trading strategies and detailed insights into key performance metrics

Central University of Finance and Economics

Beijing, China

Research on Snowball Products Return and Risk - Python

Apr 2022 – May 2022

- Carried out **Black-Scholes Model** and **Monte Carlo** simulations of CSI 500 Index for next two years, analyzed and evaluated the indicators related to the return and risk of Snowball Products and presented purchasing strategies to investors

Research on the Trend of Chinese Stock Market in the Epidemic Era - Python

Jun 2021 – May 2022

- Analyzed data of medical and restaurant industries of Chinese stock market during the epidemic, determined variable factors from 30+ research indicators, used **Lasso-Logistics**, **XGBoost** and **Random Forest** to analyze and forecast the trend