

Muyao (Jerry) Kong

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EDUCATION

New York University

Major in Computer Science

Minor in Mathematics

New York, NY

Expected May 2027

Honors: Dean's List

Relevant Coursework: Basic Algorithm, Natural Language Processing, Linear Algebra, Data Structures, Discrete Math, Statistics, Operating System, Agile Software Development and DevOps, Object Oriented Programming, Computer System Organization, Math for Econ I and II

High School Attached to Shandong Normal University

Jinan, China

GPA: 4.01 Ranking: 5%

Graduated June 2023

TECHNICAL SKILLS

Programming Languages: Proficient - Python, Java, C++, JavaScript, Familiar - C, Assembly Language

Markup Languages: Proficient - LaTeX, HTML, CSS

Database Management Systems: Familiar - MongoDB, MySQL

Frameworks: Proficient - [React.js](#), [Express.js](#), Flask

Other Libraries: Proficient - Pandas, NumPy, yFinance, Familiar - PyMySQL, Statsmodel, Matplotlib

WORK EXPERIENCE

National Supercomputing Center

Jinan, China

Algorithm and Data Analyst Intern

Jun 2024 - Aug 2024

- **Cleaned** time series device data; constructed data anomaly detection and localization algorithms to locate and process abnormal data data using **Huber Regressor** in **robust regression**.
- Built **ICC (Intraclass Correlation)** data consistency check algorithms, made judgment of consistency on the historical data of multiple related devices.
- Built machine learning **ARIMA** (Autoregressive Integrated Moving Average) model, used the constructed ARIMA model to forecast the **time series** device data.
- Wrote Python automation script for timed processing of device data, handled timed database read/write using **PyMySQL**, and processed the retrieved device data from MySQL database.

China Cinda Asset Management Co., Ltd

Beijing

Risk Management Intern

Jun 2025 – Aug 2024

China Merchants Securities Co.

Jinan, China

Wealth Management Consultant Intern

Jul 2024 – Aug 2024

- Learned professional knowledge of business and finance, such as brokerage business, capital intermediary business, as well as professional concepts such as structured deposit, risk level, etc.
- Examined the operating principles of the securities market, investigated the management structure, service processes and operating models of securities companies.
- Deep-mined, organized, screened and analyzed public fund data based on **volatility**, **maximum retracement**, **Sharpe ratio**, **downside risk**, etc.

TikTok

Remote

Self-employed Internet Influencer

Jan 2021 – Feb 2024

- Received **over 1.3 million likes**.
- Accumulated a maximum of almost **10,000 followers**.
- Posts have been viewed by **over 3000,000 people**.

RESEARCH & PROJECTS

TickerPicker: The AI-powered Stock Picker Application Based on Industry and Quantitative Metrics

Project Manager, Scrum Master and Developer

- Built a factor-based equity screener combining **fundamental** and **technical indicators** (P/E, EPS growth, MA crossovers, beta) sourced from **Yahoo Finance API**.

- Developed a Python-driven analytics engine for **real-time data retrieval** and **signal computation**.
- Designed and developed TickerPicker - interactive filter and visualizations for stocks based on fundamental and technical indicators.
- Designed and developed watchlist modules to monitor price momentum, earnings events, and portfolio-level performance.

Event Planner Web Application

Developer

- Built and deployed a **RESTful Event Planner API** with **Flask-RESTX** and **MongoDB (PyMongo)**, enabling users to create events and manage RSVPs via a documented, resource-oriented API surface.
- Implemented automated outbound notifications using **boto3** and **AWS Simple Email Service (SES)** with **environment-driven IAM/SES configuration** for upcoming-event reminders
- Developed a testing strategy with **pytest** and **mongomock** to unit-test MongoDB-backed endpoints without external dependencies, producing coverage reports (HTML) for regression visibility.
- Leveraged **Flask-RESTX** auto-generated **OpenAPI/Swagger** documentation, publishing an interactive API explorer at a production endpoint (**/docs**).

OTHER SKILLS

Languages: Chinese (Mandarin), English, Japanese, Arabic

Interests: Programming, Math, Economy, Languages, Piano