

## YUNDAI (DAISY) HU

[yh1741@nyu.edu](mailto:yh1741@nyu.edu) ▪ <https://www.linkedin.com/in/yundai-daisy-hu/>

### EDUCATION

---

#### NEW YORK UNIVERSITY

New York, NY

##### The Courant Institute of Mathematical Sciences

**MS in Mathematics in Finance** (Expected – December 2019) (3.65/4.0)

- **Current/Completed Coursework:** Object-Oriented Programming, Black-Scholes Formula, Monte Carlo Simulation, Option Greeks, Portfolio Optimization, Derivatives Pricing, Dynamic Hedging, Time Series Analysis, Statistical Arbitrage, Data Science in QF

#### STONY BROOK UNIVERSITY

Stony Brook, NY

**BS in Applied Mathematics and Statistics & BA in Economics** (August 2015 – May 2018) (3.95/4.0)

- **Coursework:** Probability Distributions, Hypothesis Test, OLS, Linear Algebra, ODE

### EXPERIENCE

---

#### GUGGENHEIM PARTNERS

New York, NY

**Quantitative Summer Analyst**(May 2019 – August 2019)

- Developed a modular Python framework that covers end-to-end quantitative research workflow including data integration, feature extraction, strategy development and back-test by referencing Marcos Lopez's book 'Advances in Financial Machine Learning'
- Conducted research on machine learning techniques of bootstrapping samples, aggregating models and reducing back-test overfitting; implemented useful methods into proprietary library
- Explored alternative datasets on market sentiment; integrated third-party vendor datasets into internal database; applied random forest to get important event categories impacting portfolio performance; back-tested investment strategies based on derived sentiment indicators
- Visualized sentiment analytics in dashboards; experimented with parquet files for data storage and dask framework and Spark for distributed computing
- Monitored exposures for multi-asset class portfolios and produced quarterly stress test, liquidity risk and derivative exposure reports that were reviewed by the Board and senior management

#### FULLGOAL FUND MANAGEMENT CO., LTD

Shanghai, CHINA

**Quantitative Summer Intern, Equity Investment Dept.** (June 2018 - August 2018)

- Conducted research on relationship between idiosyncratic volatility (IV) and excess return of Chinese A-share stocks using factor models, and found that there exists negative correlation; tested further to see how IV would predict excess return, based on 10-year historical data
- Analyzed A-shares stocks by examining stocks' idiosyncratic volatility, specificity, turnover rate and price delay to identify under/over speculated stocks

### PROJECTS

---

#### NEW YORK UNIVERSITY

New York, NY

**Course Projects** (Python/Java)

- **Market Microstructure:** calculated Roll-implied spreads for stocks; implemented tick test to classify each trade as buyer-initiated or seller-initiated
- **Option Pricing:** ran Monte Carlo simulation to price European and Asian options; distributed calculations with message-oriented middleware
- **Data Processing:** built functions to efficiently read and merge high frequency trade data
- **Clustering:** implemented fixed-size and flexible-size centroid-based clustering algorithms

### COMPUTER SKILLS/OTHER

---

**Programming Language:** Python, Java, MATLAB, R, SQL

**Languages:** Mandarin (native), English (fluent)

**Certifications:** FRM Part I