# **LIAN ZHU**

(805) 453-7056 // <u>lianzhu@nyu.edu</u> // <u>linkedin.com/in/lianzhu0321</u>

# **EDUCATION**

#### Expected 12/26 NEW YORK UNIVERSITY

New York, NY

#### The Courant Institute of Mathematical Sciences

#### M.S. in Mathematics in Finance

• Forthcoming Coursework: financial computing, stochastic calculus, dynamic asset pricing, risk portfolio management, derivatives, algorithmic trading, deep learning, Monte Carlo

#### 09/21 - 03/25 UNIVERSITY OF CALIFORNIA, SANTA BARBARA

Santa Barbara, CA

#### **B.S.** in Financial Mathematics and Statistics

- *Coursework:* linear algebra, numerical analysis, PDE, stochastic processes, regression analysis, time series, machine learning, fixed income, asset pricing, portfolio optimization, OOP
- *Honors:* Honors at Graduation (Top 10%)

# **EXPERIENCE**

#### 07/24 - 08/24 CHINA MERCHANTS SECURITIES CO., LTD.

Shenzhen, China

### **Quantitative Research Intern (Python)**

- Reviewed factor research reports from leading PRC securities firms; extracted quantitative formulas, produced weekly analytical summaries, and reported findings to the portfolio manager
- Analyzed investor behavior by decomposing reversal and momentum into daily returns and constructing factors from over 10 risk proxies using half-life-weighted excess returns
- Performed cumulative return and net-value analyses using data, backtested long-short hedged strategies (monthly IC 0.072; annualized return 1.80%; ICIR 3.15)

### 07/23 - 08/23 **BANK OF BEIJING CO., LTD.**

Beijing, China

#### **Model Development Intern (Python)**

- Designed credit risk modeling strategies, and segmented clients by risk level using rolling default rate and aging analysis to forecast credit performance
- Conducted feature engineering (generation, aggregation, transformation) and selected key variables via WOE/IV, logistic regression, and coefficient analysis
- Evaluated model performance using KS, AR, Gini, AUC, ROC, confusion matrix, and PSI
- Developed Python-based credit scorecards to help bank reduce loan default risk

## 07/22 - 08/22 **PING AN TECHNOLOGY CO., LTD.**

Shenzhen, China

# Big Data Analyst Intern (SQL, Java)

- Configured database connections and Sqoop scripts to transform ODS into ADS using SQL; handled Hive configuration, HDFS uploads, LINKDO scheduling, and validation of scripts.
- Built dashboards with Tableau, Power BI, FineBI, and the company's proprietary BI software; suggested improvements and assessed its market potential
- Diagnosed root causes of low internal app usage, proposed targeted improvements, and consolidated findings in reports to team and supervisor, leading to higher app usage

# **PROJECT**

#### 06/24 - 06/24 UNIVERSITY OF CALIFORNIA, SANTA BARBARA

Santa Barbara, CA

#### **Advanced Mathematical Finance Course Project (Python)**

- Constructed 10-stock minimum-variance portfolios, efficient frontiers, and capital market lines
- Analyzed historical portfolio performance, considering COVID and regulatory impact
- Developed hedging and rebalancing strategies

# COMPUTATIONAL SKILLS / OTHER

**Programming Languages:** Python, R, MATLAB **Languages:** English (fluent), Mandarin (native)

Activities: Chinese Chess (4th place, Beijing Junior Tournament)