SHANGQING (LEXIE) ZHUANG

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EDUCATION

New York University — New York, US
M.S. in Financial Engineering — Expected 05/2025
GPA: 3.95/4.0

University of International Business and Economics (UIBE) — Beijing, CN
B.A. in Finance — 09/2019 - 06/2023
GPA: 3.76/4.0 (Top 10%)

SKILLS

- **Programming:** Python, C++, SQL, Deep learning, Big data, LaTeX, Git, AWS, MS Office, Java.
- **Applied Math:** Regression analysis, Time series analysis, Statistics, Stochastic calculus, econometrics, Probability.
- **Finance:** Portfolio management, Risk management, Trading strategies, Factor mining, Greeks, Option pricing, Fixed income.

EXPERIENCE

Blockhouse, *Fixed Income Department* — New York, US
Quantitative Research Intern — 09/2024 - Present

- Designed Transaction Cost Analysis (TCA) model for selecting brokers by evaluating execution costs and price impact in treasury securities, with considerations for market liquidity and volatility. Utilized regression to identify key drivers of bid-ask spreads.
- Incorporated market microstructure price impact models, including the Obizhaeva-Wang (OW) model and Transient Impact Model (TIM), to quantify the price impact of trades using treasury bond transaction data from Tradeweb.

New England Investment Consulting Group LLC, *Research Department* — Remote, US
Quantitative Research Intern — 05/2024 - 08/2024

- Constructed 20+ high-frequency price and volume factors for the U.S. stock market using 1-minute data, including tide factor and market-following factor. 5 factors achieved Sharpe ratio above 2, with the top-performing factor reaching 3.6.
- Developed S&P 500 Index Enhancement Trading Strategy by leveraging mixed-frequency factors within multi-task learning (MTL) framework with custom-tailored loss function. Yielded 17.3% annualized excess return over S&P 500.
- Crafted industry and momentum related Barra factors for cross-sectional analysis through Weighted Least Squares (WLS) regression. Performed back testing to assess the effectiveness of factors as reliable risk factors.

Harvest Fund Management, *Fixed Income Department (Leading fund with* ***$230 billion AUM****)* — Beijing, CN
Quantitative Research Intern — 04/2023 - 08/2023

- Developed OOP-based Monte Carlo simulation model for pricing Chinese convertible bonds, integrating stochastic number generation to determine execution of redemption provisions. Enhanced computational efficiency by using parallel running.
- Formulated Multi-factor Rotation Strategy tailored for convertible bonds, incorporating pricing factors into stock screening. Achieved 12.3% annualized excess return, utilizing SQL queries and Python for data analysis and implementation.
- Engineered 10+ low and medium frequency alternative and volatility alpha factors, including analyst consensus expectation factor, with the best-performing factor achieving Sharpe ratio of 3.6.

Deloitte Consulting, *Risk Consulting Department* — Beijing, CN
Credit Risk Intern — 08/2021 - 11/2021

- Developed Credit Risk Rating Model tailored for corporate bonds, covering 26 distinct industry sectors, and supported by 200+ indicators. Constructed 30+ rating factors, including ESG and financial indicators, to assess credit default risk of bond issuers.
- Performed scenario and sensitivity analyses using historical default issuer data to evaluate the rating performance of new models.
- Implemented logistic regression to categorize preliminary credit scores based on essential financial metrics. The classification facilitated a tailored application of different financial ratio calculations according to determined risk levels.

PROJECT

New York University, Tandon School of Engineering — New York, US
Pricing American Option，Advisor: Professor Song Tang, FRE Department — 11/2023 - 12/2023

- Utilized Object-Oriented Programming to develop Binomial Tree model in C++ for Pricing American option. Applied backward induction, comparing immediate exercise values with continuation values for early exercise assessment.

New York University, Tandon School of Engineering — New York, US
Portfolio Visualization Dashboard，Advisor: Professor Francisco Rubio, FRE Department — 03/2024 - 05/2024

- Designed dynamic web dashboard for portfolio performance analysis utilizing Dash and Plotly. Integrated the Brinson framework to methodically attribute performance across Allocation and Selection effects, enabling precise investment insights.

EXTRACURRICULAR ACTIVITIES

- **Competition:** China Undergraduate Math Contest in Modeling, Beijing 1st Class Prize, 2021.
- **Volunteer:** Here Club (Anti-Violence Organization), 2020-2022.