# CEWEN(CHEVIS) CHI

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## EDUCATION

CARNEGIE MELLON UNIVERSITY, TEPPER SCHOOL OF BUSINESS — New York, NY
*Master of Science in Computational Finance - MSCF* — ***GRE Quant: 170 / 170*** — 12/25

- Relevant Coursework: Financial Computing, Financial Data Science, Fixed Income, Stochastic Calculus for Finance, Machine Learning, Financial Time Series Analysis, Financial Products and Markets, Simulation

UNIVERSITY OF CALIFORNIA, SAN DIEGO — La Jolla, CA
*B.Sc.in Mathematics–Applied Sciences (Computer Science Track)* — ***GPA:3.81/4.00; Major GPA:4.0/4.0*** — 03/24

- Relevant Coursework: Statistic Analysis, Stochastic Processes, Deep Learning/Neural Network, Advanced Data Structures, Machine Learning, Design & Analysis of Algorithm, Modeling & Data Analysis
- Minor: Political Science & Government (Global Policy & Strategy Department)
- Programming Skills: Python, Java, C, C++, C#, MySQL, Stata, Tableau, MATLAB

## EXPERIENCE

GUOTAI JUNAN SECURITIES — Shanghai, China
*Quantitative Researcher Intern* — 04/24 - 07/24

- **Factor Modeling:** Implemented multi-factor LSTM model to forecast A-share stock return using a decade-long dataset of 2.5 million records, building a scalable pipeline to sequentially process daily data points
- **Feature Engineering:** Built a comprehensive factor pipeline for A-share equities by integrating time-series factors (EWMA, long-term reversal) and fundamental factors (R&D-to-market, volatility), leading to a 23% reduction in training loss
- **Portfolio Optimization:** Constructed and backtested a signal-based portfolio using mean-variance optimization in the A-share market, achieving a 15.2% cumulative return, a 5.8% maximum drawdown, and a Sharpe ratio of 1.87
- **Risk Management:** Analyzed daily factor exposures for A-share equities and computed parametric (variance-covariance) and historical Value-at-Risk at 99% confidence. Recommended position adjustments, reducing simulated portfolio losses by 1.5%

SAN DIEGO SUPERCOMPUTER CENTER — La Jolla, CA
*Analyst Intern* — 10/23 - 12/23

- **Sentiment Analysis:** Designed RNN model for sentiment analysis, processing over 100,000 data points from social media, achieving an 88.5% classification accuracy and identifying key trends in customer opinions

*Software Engineer Intern, Team Lead* — 06/23 - 08/23

- **Gaming Development:** Led an intern development team to create, test, and maintain a 3D gaming application using C# in the back end, tailored to meet market demands and enhance the team's development capabilities and project efficiency

CITIC SECURITIES — Beijing, China
*Quantitative Researcher Intern* — 04/23 - 06/23

- **Stock Return Forecasting:** Built and deployed XGBoost models to forecast 21-day stock returns for over one million A-share data points (2020–2023). Leveraged fundamental factor signals, parallel processing, and L1 regularization to enhance scalability and reduce overfitting, achieving a Mean Absolute Error of 0.012 and a Root Mean Squared Error of 0.016
- **Portfolio Construction:** Constructed a weighted portfolio based on the magnitude of predicted returns, capping individual stock weights at 2% to maintain diversification. Backtested the portfolio over a one-year period, achieving a cumulative return of 22%

## PROJECT

OPTIVER TRADING COMPETITION, SILVER MEDAL WINNER, TOP 3%

- **Data Processing:** Engineered datasets over 10 million records for 200 stocks; engineered order flow imbalance (OFI) indicators across multiple price levels to capture buying/selling pressure and constructed real-time bid-ask spread dynamics
- **Statistical Analysis:** Investigated temporal evolution of spread patterns to identify market liquidity regimes; performed comprehensive analysis on factor autocorrelations and cross-predictability between OFI signals and price movements
- **Model Optimization:** Developed a LightGBM model to predict 10-minute closing price trends with a Mean Absolute Error (MAE) of 0.536. Used sequential cross-validation for robust evaluation and applied hyperparameter tuning for model enhancing

FINANCIAL MARKET ANALYSIS OF THE 2020 U.S. PRESIDENTIAL ELECTION

- **Event-Driven Research:** Analyzed minute-level market data to assess the financial market response to the 2020 U.S. Presidential election, identifying a 1% depreciation in the U.S. dollar and correlations between election probabilities and key asset returns
- **Regression Modeling:** Developed regression models to quantify the impact of reduced uncertainty and increased Democratic victory probabilities on market dynamics, demonstrating a 20% decline in market volatility and a 15% increase in bond prices

## ADDITIONAL INFORMATION

- **Interests:** Trading (achieved 110% annual return), Tennis, Skiing, Poker, Meditation