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BIN LIU

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Education

Columbia University Aug 2017 – Dec 2018

- M.A. Economics. GPA: 4.2/4.3
- Related Coursework: Advanced Econometrics, Macroeconomics, Financial Economics

University of California, Los Angeles (UCLA) Sep 2013 – Jun 2017

- B.A. Business Economics, minor in Mathematics and Accounting. GPA: 3.9/4; Major GPA: 4.0
- Related Coursework: Econometrics, Game Theory, Mathematical Statistics, Probability Theory, Optimization, Graphical Network Analysis, Partial Differential Equations, Stochastic Process

Experience

XLP Capital, New York Jun 2018 – Aug 2018
Hedge Fund Summer Quantitative Analyst (R&D)

- Designed new energy-based machine learning model for time series prediction, which improved the old baseline model by 20% in terms of negative log-likelihood
- Built LSTM model with attention in J language to enhance return on a $300M algorithmic fund
- Vectorized existing neural network models by J language and shortened training time by 50% of an algorithm running on Kdb and Jd database
- Implemented variations of LSTM, RNN, VAR models in J and Python to facilitate algo research
- Developed a web scrapper in Ruby to collect stock price data and calculate momentum indicators

Shenyin & Wanguo Futures, Shanghai Jul 2017 – Aug 2017
Quantitative Summer Analyst – Research Institute

- Implemented and backtested R-Breaker momentum/reversal trading strategy in R and excel
- Built and tested an Empirical Mode Decomposition (EMD) indicator algorithm in R, which had directional prediction accuracy over 70% on CSI 300 stock index over 2014-2017
- Researched topics in Generalized Extreme Value distribution and Bayesian inference to facilitate development of a new commodity futures trading strategy

Morgan Stanley Huaxin Securities, Shanghai Jul 2016 – Aug 2016
Investment Banking Summer Analyst – Debt Capital Markets Group

- Drafted prospectus and due diligence reports for a CNY 6.4B bond issuance deal
- Presented on bond issuance details in pre-offering roadshows for the deal above
- Wrote research reports on bond default cases and industry credit analysis (steel and real estate)

Campus Activities

Research Assistant, UCLA Dec 2015 – Jun 2017
Research Assistant to Aaron Tornell, Professor of Economics at UCLA

- Collected data and performed macroeconomic analysis on Chinese boom-bust cycle research

Admission Assistant, UCLA Feb 2016 – Jun 2017
Master of Applied Economics Program

- Reviewed applicants' backgrounds and statements of purposes

Honors & Certificates

- Kathryn and Shelby Cullom Davis International Fellowship – Columbia University
- John J. Peterson Scholarship – UCLA Economics Department
- Passed CFA Level II, Level III Candidate
- Bloomberg Aptitude Test – Score: 700, 99th percentile, second place worldwide in Nov 2015
- Princeton University Mathematics Competition (high school) – first place in Geometry round, third place in Individual Final round, second place in Team round

Skills & Interests

- Programming languages: R, Python, J/K/APL, Stata, Matlab, Ruby, SAS
- Professional Tools: Bloomberg, Excel/VBA, WRDS, TradeStation, linux
- Interests: solving puzzles, playing Go and Gomoku, windsurfing