YANER HE

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EDUCATION

NEW YORK UNIVERSITY New York, NY
The Courant Institute of Mathematical Sciences
MS in Mathematics in Finance (expected – Dec 2020)

- ***Coursework***: Computing in finance, risk and portfolio management, derivative securities

UNIVERSITY OF CALIFORNIA, LOS ANGELES (UCLA) Los Angeles, CA
BS in Statistics; BS in Financial Actuarial Mathematics (2016 – 2018)

- ***Coursework***: Real analysis, data mining, Monte Carlo methods, stochastic calculus

EXPERIENCE

THE TCW GROUP, INC. Los Angeles, CA
Intern in Emerging Markets Fixed Income Group (Mar 2019 – June 2019)

- Estimated equilibrium EM exchange rates based on co-integration relationship among FX, domestic fundamentals and global drivers
- Computed appreciation and depreciation dynamics of FX using vector-error correction
- Modeled EM sovereign credit spreads in R using panel regression with fixed effects based on 10-year macroeconomic and financial fundamentals for 15 countries
- Presented to team detailed model methodologies and data visualizations of model results on country and regional bases across the past 10 years

Intern in Emerging Markets Equity Group (June 2018 – Aug 2018) New York, NY

- Collected and manipulated 10-year financial statement datasets for over 1,000 securities in R from Bloomberg terminal and improved code efficiency by 50%
- Implemented OLS and Theil-Sen regression to estimate the fair values of each company based on 26 accounting metrics as predictors
- Back-tested models with five-year trailing and analyzed the performance of the portfolio in VBA
- Generated recurring system of constructing monthly optimal portfolio with 2% monthly alpha

ALPHABYTE CAPITAL Los Angeles, CA
Quantitative Intern (Apr 2018 – June 2018)

- Constructed equally weighted and cap-weighted indices of five cryptocurrencies and rebalanced indices on multiple frequency bases
- Built regression models for bitcoin price and potential predictors, M2 and 10-Year Treasury Rate

PROJECTS

UNIVERSITY OF CALIFORNIA, LOS ANGELES Los Angeles, CA
Job Market Analysis for Indeed in American Statistical Association DataFest

- Developed AI model using Naive Bayes classifier in R to predict industry variable with 90% missing values in job posting dataset and to further identify demand and supply in labor market
- Winner of Judges' Choice in a five-member team among over 50 teams

Optimal Portfolios Construction and Portfolio Performance Analysis in R

- Conducted portfolio optimization using methods of Markowitz, equal allocation, single index, constant correlation and multiple-group models for over 20 stocks from different industries
- Compared portfolio performances with index benchmark (S&P500) regarding Sharpe ratio, Treynor measure, Jensen's alpha, and differential return with risk measured by standard deviation
- Back-tested constructed portfolios, performed statistical analysis and pairwise comparison, and finally came up with the single index model as the best performed one

COMPUTER SKILLS/OTHER

Programming Languages: R, Python, Java
Other Software: Microsoft Office; Bloomberg, SAS, Stata, LaTeX
Languages: English (fluent), Mandarin (native)
Credentials: CFA Level II candidate; Society of Actuaries: Exam P/Probability, Exam FM/Financial Math