Dapeng Shang

EDUCATION

University of Michigan — Ann Arbor, MI

M.S. in Applied Statistics· GPA: 3.9/4.0 — *Sept.2016-Dec.2017*

M.S. in Quantitative Finance and Risk Management · GPA: 3.7/4.0 — *Sept.2015-Apr.2017*

Courses: Applied Statistics, Advanced Financial Mathematics, Stochastic Analysis, Numerical Methods(Matlab), Statistical Models & Methods for Financial Data(R), Machine Learning(Python), Statistical Computing(C++), Computational Finance

Shandong University — Jinan, China

B.S. in Financial Mathematics and Financial Engineering · GPA: 89.3/100 — *Sept. 2011-Jun. 2015*

Courses: C++ Programming, Database Management(SQL), Accounting, Micro/Macroeconomics, Time Series, Financial Risk Management, Fixed Income Securities, Investment

University of California — Berkeley, CA

Exchange student in Economics Department, Oversea Exchange Scholarship — *Jan. 2014- May 2014*

Courses: Econometrics (PhD Level), Applied Econometrics and Public Policy, Topics in Economic Research

PROFESSIONAL EXPERIENCE

Invesco Great Wall Fund Management Co. Ltd — Shenzhen, China

Quantitative Analyst — Jul. 2017-Sept.2017

- Designed new factors in multifactor model for index futures based on option (including put-call ratio, volatility spread and volatility skew) and open interest data, optimized factors using random forest and Lasso
- Implemented backtesting of several CTA strategies to identify market trend by trend, reversal and pattern recognition, and evaluated strategy performance

Ross School of Business | *Supervisor: Prof. Nejat Seyhun* — Ann Arbor, MI

Research Assistant — May 2016-Oct. 2016

- Investigating commercial banks' daily trading records, proposing questions about missing or inaccurate values
- Collecting and organizing data from FactSet and SEC onto Excel spreadsheets
- Analyzing banks' transaction data concerning LIBOR rates and filtering the data with SAS

Southwest Securities Co., Ltd. — Jinan, China

Financial Analysis Assistant — Jul. 2014-Sept. 2014

- Assisted senior manager with IPO preparation work of enterprises and regular checks of their financial statements
- Drafted valuation report regarding SWOT analysis, financial status, management structure and potential risks of one listed company and the assessment of its absolute value by means of FCFF model & CAPM model

Huaxia Bank Co., Ltd. — Jinan, China

Summer Credit Analyst — Jun. 2013-Aug. 2013

- Collected and analyzed customer credit information by examining clients' financial statements, cash flow reports, invoices, leasing contracts and other supporting materials for institutional and retail sizes of loans
- Assisted senior professionals in evaluating client risk, setting credit limits, and putting collateral on loans

PROJECT EXPERIENCE

Gender Recognition by Voice using Statistical Learning — Mar. 2017-Apr. 2017

- Implemented four different classification methods (random forest, neural network, Xgboost and KNN) on the task of gender recognition, using high-dimensional features of voice as predictors
- Visualized the classification boundary on first two PCAs and compared the efficiency of different methods

Modeling of Yield Curve Dynamics — Feb. 2017-Mar. 2017

- Calibrated the Vasicek, CIR and Hull White models using US treasury bond price data, and tested parameters' stability
- Fitted ARIMA model to predict parameters in models and generated a trading strategy based on forecasted yield curve

Multifactor Portfolio Model Simulation with Monte Carlo — Oct. 2016-Dec. 2016

- Using a Monte Carlo simulation of financial markets relevant to a client portfolio to forecast distribution of P&L in Python
- Built a set of classes for statistically analyzing the simulated P&L, including VaR and Expected Shortfall

Machine Learning Algorithm to Forecast Stock Market Volatility — Mar. 2016-Apr. 2016

- Adopted recurrent algorithm to build Support Vector Regression (SVR) based GARCH model
- Applied the new model to predict the volatility of S&P 500 Index and compared with traditional model in Python

SKILLS

Programming and data processing tools: Python, Matlab, R, SQL, STATA, Bloomberg

Certifications: FRM Exam Part I, Bloomberg Market Concepts