TANG Xiaoxiao

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EDUCATION

School of Mathematics, University of Michigan, Ann Arbor 09/2017-

Master of Science in Quantitative Finance and Risk Management

- **Math & Stats:** Stochastic Process, Linear Regression, Multivariate Statistical Model
- **Finance:** Portfolio Dynamics, Arbitrage Pricing, Risk Management
- **Computer Science:** Data Mining, Computational Finance

School of Mathematics, Shandong University (SDU) 09/2013-07/2017

Bachelor of Science in Statistics

- **Coursework:** Operational Research, Time Series Analysis, Partial Differential Equations, Insurance Actuarial Mathematics

WORK EXPERIENCE

KPMG China，HQ 06/2018-08/2018

Department：Financial Risk Management, Risk Analyst

- Designed 8-grade default risk rating model for Hyundai Capital to monitor the credit level of clients
- Created list of 150 risk points and shorten it to 40 by calculating AR and VIF
- Determined the weight coefficient by AHP and logistic regression, using SAS and R programming

LENOVO, HQ 08/2016-10/2016

Division: Financial Management Department, Business Analyst Intern

- Cleaned operational data from all branches in China using SPSS
- Built automated EXCEL spread sheets to calculate yields, net value and other indicators to monitor business operation efficiency
- Delivered profit-and-loss statement and updated finance system monthly

CHINA EVERBRIGHT BANK, Hefei Branch 08/2015-10/2015

Cebbank Young Talent Program, Intern

- Offered account, wire transfer and foreign currency exchange services
- Communicated with potential customers during outdoor marketing activities

PROJECTS

Research on the Complex Networks Theory-based Modeling of Adaptive Market Hypothesis and Its Evolution

- Established a complex network-based Adaptive Market Hypothesis (AMH) to simulate fluctuations of market via MATLAB
- Described the trial and error learning behavior of investors in the financial market using Bayesian learning network theory
- Applied DE Groote model to quantitatively describe the irrational behavior of investors, such as overconfidence, herd effect, and risk preference of investors.

Analysis on Investors' Short-term Herd Behavior

- Established a more general BHW model which can analyze the short-term herd behavior based on risk-averse BHW model
- Introduced investor sentiment factors to short-term utility function, and simulated the generation of information cascade
- Analyzed the optimal decision-making behavior of investors based on information accuracy in the market, and offered policy suggestions to government

The Bath System Model based on Dynamic Programming and Brownian Motion

- Designed dynamic water temperature model with random parameters, using Brownian Motion to describe the Random disturbance of people
- Improved previous model by taking into account heat transfer between different medium, and approximated heat loss
- Solved three-dimensional heat conduction equation numerically by using two-dimensional Monte Carlo value equation, and determined optimum resources configuration for customers

Optimization Model for Portfolio Investment and Risk Allocation

- Conducted risk-control model and profits-gaining model to simulate investor's investment behavior, based on Portfolio Theory
- Set up multilevel statistical model to balance the revenue and risk by adopting risk preference coefficient, offered different investment plans for investors

COMPUTER SKILLS / OTHER

Programming Languages: Python (1 year), R (3 years), MATLAB (2 years), SQL (1 year), C (1 year)