MINZHENGXIONG (BEAR) ZHANG

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EDUCATION

Temple University, Fox school of business Philadelphia PA
PhD Candidate in Statistics - Research Assistant Scholarship **GPA 3.95 /4** Expected May 2022
Supervisor: Edoardo M Airoldi

Florida State University, Department of Statistics Tallahassee FL
PhD Candidate in Biostatistics - The Dean's Scholarship of FSU **GPA 3.917/4** Aug 2018
Coursework Includes Supervised Research, Statistics in Applications II, Epidemiology for Statisticians, Clinical Trials, Statistical Inference, Advanced Probability and Inference

University of Manchester, School of Mathematics Manchester UK
MSc in Financial Statistics - Master of Science degree with distinction **GPA 4.000/4** Aug 2015 – Dec 2016
Core Modules: Statistical Modelling in Finance, Extreme Values and Financial Risk, Time Series and Financial Forecasting, GLM, Survival Analysis, Nonparametric Regression, Longitudinal Data Analysis, Markov Chain Monte Carlo

University of Western Ontario, Department of Statistical and Actuarial Science London Canada
Exchange Program in Statistics – Scholarship Student **GPA 3.570/4** Sept 2013 – June 2014
Coursework includes Financial Modelling1, Data Analysis, Time Series, Regression, Statistical Programming, Experimental Design, Markov Chains with Application, Intermediate Probability, Mathematical Statistics, Study Design

South China University of Technology, School of Mathematics Guangzhou China
BSc in Mathematics **GPA 3.437/4** Sept 2010 – July 2013
Coursework includes Microeconomics, Macroeconomics, Investment, Accounting, Market Research and Forecast, Mathematical Modelling, Applied Linear Algebra, Data Structure, Database and Its Application, C++, Management Science, Math Statistics

EXPERIENCE

Earned Charted Financial Analyst Level I Dec 2018

RiskSpan Arlington, VA
Quantitative Model Analyst May 2018 – Aug 2018
- Mortgage Backed Securities (MBS) Data Analysis; Credit Risk Model for Alternative Asset Classes: Maritime
- Traditional Prepayment Model of MBS; Financial Model Performance Improvement
- MBS Prepayment Machine Learning Model; MBS Prepayment Neural Network Model; Feature Engineering of MBS

Yunnan University, School of Mathematics and Statistics Kunming China
Research Assistant of project: The Trading Time Risks of Stock Investment Jan 2017 – July 2017
- Downloaded stock price records for S&P500, Hushen300 through yahoo finance, calculated Trading Time Risk
- Specified long memory effects, fitted ARFIMA model, fitted nonparametric distribution with different kernel densities
- Concluded that the longer time owning stocks the weaker absolute trading time risk

Yunnan University, School of Big Data Kunming China
Research Assistant of project: The Analysis of the Traveling Data in Yunnan Province Jan 2017 – July 2017
- Filtered Longitudinal data by grouped cities, tested data correlation and auto-correlation, produced ARMA error covariance
- Fitted generalized linear mixed model for the traveling data, specified correlated errors, factored the data by festival or not
- Collected open source data through Hadoop, filtered structured and unstructured data, prepared for the big data analysis
- Predicted the number of visitors for each spot, gave transportation and pricing suggestions to the government tourism bureau

RESEARCH

Model-assisted Design of Experiments with stratifications or SBM in Network-correlated outcomes Sept 2019 – June 2020

Sporadic Bayesian Predictive Synthesis Feb 2020 – June 2020

Unbiased Estimation of Causal Effects in Bipartite Randomized Experiments Sept 2019 – Feb 2020

Longitudinal Analysis on Various Factors for Human Immune System in R Jan 2018 – April 2018
- As a team leader, managed program development process, integrated and debugged code, wrote and presented the report
- Collected data from paper (Zeger, Diggle 1994), flitted Longitudinal data grouped by patient, bootstrapped missing data
- Fitted linear mixed model iteratively of mean function, random effects, correlation of random effects and random errors

COMPUTER SKILLS AND MODELLING KNOWLEDGE

Computer Skills: R, SAS, MATLAB, Python, SPSS, Hadoop, API, C++, SQL, VBA, HTML, Windows, Mac OS, Linux
Mixed Knowledge: Quantitative Finance, Foreign Exchange, Stock, Derivatives, Finance, Economic History, Psychology

HOBBIES AND INTERESTS

International Chess: 3rd place, National Youth Championship 2004
Martial Arts: Black belts for Wushu & Tae Kwon Do, 3rd place Guangdong Collegiate Free Style Boxing championship 2011