Yijun Xie

Objectives

I have solid knowledge, research experience, and application skills in quantitative analysis and machine learning. I am looking for a part-time position where I can work on challenging projects in data mining, machine learning, and financial modeling.

Education

University of Waterloo

Ph.D. in Statistics | Expected May 2021
Faculty of Mathematics
Department of Statistics and Actuarial Science

University of British Columbia

Master of Science | May 2017
Faculty of Science
Department of Statistics
GPA: 87/100 (3.89 / 4 US equivalent)

University of Notre Dame

BSc *cum laude* | May 2015
College of Science, Dean's List
Department of Applied and Computational Mathematics ans Statistics
Cumulative GPA: 3.84 / 4
Major GPA: 3.97 / 4

Thesis

Title: A Flexible Inference Method for an Autoregressive Stochastic Volatility Model with an Application to Risk Management
Supervisor: Dr. Natalia Nolde, UBC
Abstract: New inference method for ARSV model based on MCMC method to allow flexible choices of both innovation distributions in ARSV model, and its application to measure forecasting for financial time series.

Selected Coursework

Data Mining
Statistical Consulting
Bootstrapping
Mathematical/Computer Modeling
Stochastic Analysis
Time Series Analysis
Robust Statistics

Experience

Graduate Research Assistant

Department of Statistics, UBC January 2016–April 2017

- Focused on combination of time series models and machine learning techniques
- **Presented Poster at:** Statistical Society of Canada Annual Meeting Student Conference, Brock University, St. Catharines, Canada
- Conducted comparison test between methods with traditional and comparative backtests
- Proposed innovative inference method for ARSV model, implementing Markov Chain Monte Carlo method and parallel computing technique
- Developed measures of Conditional VaR
- Working on thesis project and a journal paper based on this research

Graduate Teaching Assistant

Department of Statistics, UBC September 2015–April 2017

- Teaching assistant for an introductory course of statistics
- Organized lab sessions and mentored student for statistical experiments
- Held office hours, tutored students with little background knowledge to understand statistical concepts
- Helped instructors to prepare course material and organize online discussion board

Undergraduate Research Assistant

Department of ACMS, Notre Dame January 2014–May 2015

- Focused on comparison of volatility estimators
- **Presented Poster at:** College of Science Joint Annual Meeting, Notre Dame, IN
- Proposed original comparison method between different estimators
- Designed algorithm for estimator selection

Leadership

- **Organizer**, Student Seminar Series, September 2016–April 2017
- **Coordinator**, Financial Statistics Reading Group, September 2016–March 2017
- **Organizer**, Graduate Student Trip, September 2016
- **Vice President**, Notre Dame Actuarial Science Club, 2013–2014

Skills

Computer: **R**, Python, MATLAB, SQL, Linux
Credentials: SOA Exam: P, FM, MFE, C (October 2012 - July 2013)
Language: Fluent in English, native speaker of Chinese