Esther (Shuangning) Zhu

536 S Forest Ave. Apt 511, Ann Arbor, MI 48104 • (734) 757-3940 • shuangnz@umich.edu

EDUCATION

University of Michigan Ann Arbor, MI

Master of Science in Quantitative Finance and Risk Management *Sept. 2017 – Expected May 2018*

Bachelor of Science in Financial Mathematics *Sept. 2015 – May 2017*

- GPA: **3.89/4.00** James B. Angell Scholar and University Honors
- Courses: Financial Math, Stochastic Process, Linear Programming, Probability, Statistics, Computer Science

Beijing Foreign Studies University Beijing, China

Double Major in Finance and English Literature *Sept. 2012 – Jun. 2015*

- GPA: **3.62/4.00** Global Times Scholarship (Top 5%)
- Courses: Financial Accounting, Merger and Acquisition, Financial Statement Analysis, International Finance

WORK EXPERIENCE

Stephen M. Ross School of Business Ann Arbor, MI

Research Assistant *Sept. 2017 – Present*

- Consolidate and cleanse big data of company information, generate lists and data frames for analysis
- Categorize companies by industry code (i.e. SIC, NAICS) and measure market concentration by HHI
- Extract 50-year data of 10 countries from sources such as Bloomberg, FRED, World Bank, IMF and etc.
- Use Python Pandas and R to do regression and conduct fundamental analysis

Chinalin Securities Co. Beijing, China

Fixed Income Summer Intern *Jul. 2017 – Aug. 2017*

- Modeled cash flow and bond structure of a $60M Asset Backed Securities(ABS)
- Finalized documentation of securitization, closing transaction 2 weeks ahead of schedule
- Conducted research on electric power industry that supported seniors to implement risk analytics
- Checked on financial statements and data files, contributing to collection of preliminary pool

Stephen M. Ross School of Business Ann Arbor, MI

Research Assistant *May 2017 – Jun. 2017*

- Assisted on the paper *"Estimating and Testing Dynamic Corporate Finance Models"*
- Revised a Monte Carlo study, using C++ and Python to make multiple simulations on Linux system

China Guangfa Bank Beijing, China

Investment Analyst Intern *Feb. 2015 – Mar. 2015*

- Segmented 700 customers in database, improving the quality of customer service
- Connected with more than 150 industrial clients and assisted them in the system update process

PROJECT EXPERIENCE

Financial Research Commercialization| Ross School of Business Fall 2017 Ann Arbor, MI

- Modified business model of a start-up, predicted quarterly EBITDA for 5 years, and pitched to Venture Capital firms

Multi-package Delivery Project| Industrial and Operations Engineering Fall 2017 Ann Arbor, MI

- Built models to optimize delivery decision for companies, used AMPL to solve *Travelling Salesman Problem*

SKILLS

- **R:** Split and merged big data, conducted regression diagnostics, transformed and selected the best model to fit data
- **C++:** Used natural language processing and machine learning techniques, implemented and debugged 10+ projects
- **Python:** Wrote algorithms to model market risk and built Monte Carlo simulations of 3 stocks
- **Excel:** Applied financial functions and tools such as VLookUp, Risk, Precision Tree, and Solver