# Zixuan Zhu

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## **EDUCATION**

#### University of Michigan

Ann Arbor, MI

M.S. in Quantitative Finance and Risk Management, GPA:3.6/4.0

Sept 2017 - Dec 2018

•Coursework: Machine Learning, Advanced Financial Mathematics, Stochastic Analysis, Data Mining

# Nankai University, School of Mathematical Science

Tianjin, China

Bachelor of Mathematics and Applied Mathematics, GPA: 3.7/4.0

Sept 2013 - Jun 2017

- Coursework: Investment, Financial Engineering, Probability Theory, Operational Research, Multivariate Analysis
- •Scholarship: Outstanding Student Scholarship of Nankai University
- Award: Successful Participant in American Mathematical Contest in Modeling, Second Prize in Contemporary Undergraduate Mathematical Contest in Modeling

# University of California-Berkeley, Haas School of Business

Berkeley, CA

Summer Session, GPA: 3.5/4.0

Jul 2015 - Aug 2015

• Coursework: Introduction to Financial Accounting, Introduction to Managerial Accounting

#### PROFESSIONAL EXPERIENCE

**Willis Towers Watson** 

Beijing, China

Benefits & Actuarial Consultant Intern

Dec 2016 - Mar 2017

- Organized and cleaned data compiled from clients and checked IAS for further computing with Excel VBA
- Compiled and reviewed 20 actuarial reports with modeling results, based on CAS or IAS

**Everbright Securities** 

Tianjin, China

Quantitative Analysis Intern

Sept 2016 - Nov 2016

- Developed algorithmic trading strategies on Chinese A share stocks and CSI300 stock index using python
- Built market strategy timing yielding 15% annual return, 1.2 Sharp ratio, and 5% MDD

## China Development Bank

Beijing, China

Risk Management Intern

Jul 2016 - Sept 2016

- Analyzed 20 historical default cases and drafted research report based on findings
- Improved internal Default Probability and Accurate Rate model based on Basel III
- Completed spreadsheet automation with VBA, and updated in-house C++ and Matlab codes

# **Taikang Life Insurance**

Tianjin, China

Marketing Intern

Mar 2016 - Apr 2016

- Generated 500 earnings reports, cleaned data from branches and conducted statistical analysis with R
- Designed 3 pitch books of newly launched product, based on product characteristics and market data
- Facilitated compilation of about 200 claims from previous year

#### **RESEARCH & PROJECTS**

## Hilbert-Huang Transform Based Volatility Analysis on High-frequency Stock Price

Nov 2016 - Apr 2017

- Prepared big high-frequency stock price data by eliminating outliers, reasonably completing missing values and aligning the length of each entry with python.
- Applied Empirical Mode Decomposition to non-linear and non-stationary time series data and got Intrinsic Mode Function to do Hilbert-Huang Transformation with explanation related to practical meaning.

#### Tianjin Undergraduate Training Program for Innovation and Entrepreneurship

Mar 2015 - Apr 2016

A Study on Factors Influencing Quality of Third Party Payment Platform and Evaluation System

- Utilized Analytic Network Process and triangular fuzzy number, together with SuperDecisions software, to calculate weights of each factor
- Distributed over 2000 questionnaires and analyzed data, using SPSS to conduct correlation test

# **SKILLS**

- Programming: C++, Matlab, VBA, R, Python
- Software packages: Excel, LaTeX, SPSS
- Passed Level I of the CFA Program.