

# Zihao Xia

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## Skills and Credentials

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**Programming:** Python, R, L<sup>A</sup>T<sub>E</sub>X

**Mathematics:** Stochastic Calculus, Computational Methods, Time Series Analysis

**Certifications:** Bloomberg Market Concepts

## Education

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**M.S. Mathematical Finance & Financial Technology**

Boston University, Questrom School of Business

Expected January 2023

Boston, MA

- Coursework: Statistics, Programming (R, Python, C++), Stochastic Methods of Asset Pricing

**B.A. Actuarial Science, double major in Statistics [GPA 3.67]**

University of Illinois at Urbana-Champaign

May 2021

Champaign, IL

- Dean's list, Distinction in Actuarial Science, High Distinction in Statistics
- Coursework: Data Analysis, Differential Equations, Statistical Computing, Linear and Integer Programming, Multivariable Calculus, Probability & Statistics, Ordinary Differential Equations, Linear Algebra

## Experience

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**Finance Department Intern**

Development and Reform Bureau

June 2021 - August 2021

Guangzhou, China

- Researched listed companies within the jurisdiction about their state of operation, analyzed how to provide government policy support for these companies
- Collected economic data (i.e., GDP, the added value of primary, secondary, tertiary sector, total retail sales of consumer goods) to create the report on the work of the government in the first half of the year
- Worked with mutual fund company to develop Real Estate Investment Trusts (REIT) for government infrastructure

## Projects

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**Financial Business Owner's Policy (BOP) Loss Predictive Model**

Research Assistant of Professor Zhiyu Quan

Spring 2021

Champaign, IL

- Built a loss prediction model for COUNTRY Financial Insurance to improve underwriting efficiency
- Collected risk characteristics for over 30 industries to interpret data and understand customer behavior
- Utilizing Python, cleaned over 600,000 pieces of data, exercised Light Gradient Boosted Machine (LightGBM) and Hyper Parameter Tuning to fit models with different variable combinations, compared models based on metrics (i.e., Gini index, RMSE, MAE...) and selected the loss model with best performance

## Additional Information

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**Languages:** Mandarin, Cantonese, English

**Interests:** Basketball, Cycling (biked across America from New York City to San Francisco in summer 2019)