

# SHI ZHIXI

Research Assistant

CityU (HK), College of Business, Department of Accountancy

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Research interests: ESG, Corporate Disclosures

## EDUCATION

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### National University of Singapore (NUS)

*Master of Science in Statistics GPA: 4.3/5.0*

Singapore

*August 2022 - Jan 2024*

- **Relevant Modules:** Statistical Foundations of Data Science, Applied Regression Analysis, Analysis of Time Series Data, Sampling from Finite Populations.

### Zhongnan University of Economics and Law (ZUEL)

*Bachelor of Economics in Financial Engineering GPA: 3.9/4.0*

China

*August 2018 - June 2022*

- **Relevant Modules:** Corporate Finance, Securities Investment, Financial Engineering.

### University of California, Berkeley (UCB)

*Summer school*

U.S.A

*Jul 2019 - Aug 2019*

## RESEARCH PROJECT

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### Determinants and Consequences of ESG Considerations in M&A Due Diligence: Evidence from Textual Analysis

Work in progress

- **Coauthors:** Prof. SAHOO Satish

## RESEARCH EXPERIENCE

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### City University of Hong Kong (CityU)

*Full-time Research Assistant in Department of Accountancy*

Jun 2023 - present

*Supervisor: Prof. SAHOO Satish*

#### Projects Assisted on:

- **ESG Disclosure project:**
  - \* Data cleaning and Merging- Merged a hand-collected dataset regarding sustainability disclosure with CRSP, Compustat, Trucost, and Audit analytics Comment Letter datasets.
  - \* Data Analysis- Identified control firm based on Propensity Score Matching, Employed Panel data models, Difference in Differences model (Traditional DID models), Conducted Event Study, performed cross-sectional tests, and analyzed and interpreted results.
  - \* Literature Review- Assisted in Literature review on Comment Letters and Sustainability reporting.
- **Strategic ESG Management before M&A:**
  - \* Data cleaning and Merging- Computed customized ESG scores using individual component scores in MSCI KLD database and merged them with SDC M&A data, Compustat and CRSP.
  - \* Data Analysis- Identified control sample for target firms based on PSM scores computed from estimating the Likelihood of being acquired, Employed Difference in Differences model (Generalized and Traditional DID), Performed cross-sectional tests, and analyzed and interpreted results.
  - \* Literature Review- Assisted in Literature review on greenwashing, green Investing, and ESG-related disclosures.
- **Purchase Price Allocation (PPA) Date Check:**
  - \* Developed a Python Program to download SEC filings from the EDGAR website using Python.
  - \* Processed html files to validate potential PPA disclosure files, highlighted keywords, identified table tags to extract goodwill values from the PPA table, created the corresponding hyperlinks in the html file, and determined PPA disclosure date for each transaction using Python.

### National University of Singapore (NUS)

*Part-time Research Assistant in department of Accounting*

Feb 2023 - Aug 2023

*Supervisor: Prof. DU Mengqiao*

- **Company names matching:** Used python to clean company names through removing general words, brackets and specific portions using regular expressions, matched between datasets and manual checked in the end.

- **Employee review dataset matching and analysis:** Conducted descriptive statistics and correlation analysis on the employee ratings and some control variables; Created firm-quarter level employee ratings panel data and did cross-sectional tests to replicate the relationship between employee ratings, stock return and some firm characteristics based on one paper.

## International Institute of Green Finance CUFE

Dec 2022 - Mar 2023

*Part-time Research Assistant in transition finance*

*Supervisor: Mr. ZHAO Xin*

- **Research on transition finance framework:** Analysed the characteristics, timeline and logical framework of policies and regulations in different countries, finally wrote a paper named 'Lessons Learned from International Experience in Transition Finance Frameworks: A Case Study of the European Union and Japan'(in Chinese).
- **Research on Chinese transition finance current status:** Co-authored a media article with Zhao Xin named "What's holding back transition finance in China?" published in China Dialogue.
- **Literature review on transition finance tools:** Assisted in literature review on Sustainability-linked bonds and Sustainability-linked loan.

## OTHER PROJECT EXPERIENCE

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### Airline review dataset challenge: Overall Rating prediction

NUS ST5188

*Team Leader and Reporter*

*Aug 2023 - Present*

- Supervisor/Module Lecturer: Prof. Markus Kirchberg
- **Sentiment Analysis:** Apply pre-trained BERT model to extract sentiment score from the review.
- **Text features construction:** Construct text features, including Tone, Length, Readability and similarity between the review title and review content and aggregate them to construct 'Helpfulness\_score' variable to measure the quality of the review.
- **Modeling and Evaluation:** Experiment with various models, ultimately selecting the random forest regression model that exhibits the lowest Mean Squared Error (MSE) and highest R-Squared value as the final model to predict the overall rating in airline.

### Research on credit risk of green credit based on modified KMV model

Graduation Dissertation

*Individual research*

*Dec 2021 - Mar 2022*

- Compared Model discrimination under 121 pairs potential default distance and selected one to modify KMV model based on the latest data of China's capital market with MATLAB.
- Analyzed the risk of green credit before and after COVID-19 and provided suggestions on green credit investment.

## SKILLS

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### Software/Programming skills

- SAS/Stata: Proficient. (Merging datasets, invoking macros, and running regressions).
- Python/R: Considerable experience in algorithm implementation, data cleaning, and HTML processing. NumPy/Pandas/Beautiful Soup.
- Matlab/Julia/SQL: Basic exposure to the tools via Course work and Projects.

### Language skills

- Mandarin (Native), English (Fluently)
- Standard Test: GRE: 324 (quantitative 170 + verbal 154 + writing 3.5) IELTS: 7.5

### Professional Certificates

- FRM Level 1 (2021) & Level 2 (2023) passed

## INTERNSHIP EXPERIENCE

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### **Cushman & Wakefield**

*Strategic Consultant Intern*

Wuhan, Hubei

*Sept 2021 - Jan 2022*

- Contributed to business and industry planning, investigated aging office building delegated by district government and dealt with mass survey data with excel, supporting government make related policies.

### **GUANGDONG FINANCE TRUST CO.LTD**

*Structured Finance Intern*

Guangzhou, Guangdong

*Jul 2021 - Sept 2021*

- Analysed the credit risk of investment targets and wrote due diligence reports for newly set up collective capital trust projects.
- Sorted out investor's documents and trust projects contracts, legal opinions, etc to help maintain customer relationships.