# Zijian ZHANG

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#### **Education**

# City University of HongKong, Department of Information System

Hong Kong, China

MSc in Business Data and Analytic 3.58/4.30

08/2022-08/2023

**Relevant Courses:** Data Mining, Data Visualization, Database Management systems, Statistical Data Analysis, Analytical Programming with Python, (Human-Computer Interaction), etc.

Nanjing Agriculture University, Department of Agricultural Economy

Nanjing, China

Bachelor of Economy (Top2Nationwide,211) 87/100

09/2018-06/2022

**Relevant Courses:** Applied Statistics, Calculus, Linear Algebra, Econometrics (95+)

## **Working Experience**

## Baptist University of Hong Kong, Department of AEF

Hong Kong, China

08/2023-present

Teaching Assistant 08
TA for Undergraduate course "ECON4006 Time Series Analysis and Forecasting"

Graduate course "ECON7880 Foundations in Big Data Analytics: Concepts and Techniques"

## Beijing Core biology science and technology co.,ltd

Beijing, China

**Product Research Assistant** 

06/2021-08/2021

This work is about a disease detection kit development project. Mainly assisted the experimental team in characteristic engineering of clinical samples. Reduced the dimension and visualized the experimental results, and evaluated the sensitivity and specificity of the kit.

### **Publication**

A Four-Modality Fusion Method of Crowdfunding Project Reasoning. **Zijian ZHANG,** 

11/2023

working paper [paper] [code] [website]

Do Trust in Crowdfunding Effects Investing Decisions?-Evidence From Reward-Crowdfunding Platform? 09/2023

Zijian ZHANG,

working paper [paper]

Using Multiple Forms of Cues and Signals to Predict Crowdfunding Success.

Zijian ZHANG,

working paper [paper] [code]

07/2023

Does InformationInfrastructure Promote Better Resident Health?

08/2023

Zijian ZHANG, Han Ye

Journal of health economics, under review (JCR Q1)

Analysis of the Influence of "Insurance + Futures" Pilot on Farmers' Input and Management Scale of Agricultural Resources. 07/2021

Zijian ZHANG, LIU Yan; ZHANG Hanie; ZHENG Shubha; CHEN Xiyu,

Journal of Tianjin Agricultural Science, published (JCT Cited:3)

## **Academic Projects**

# Individual Project: Multi-modal Prediction Analysis of Crowdfunding Platform

HK, China

## Instructor:Professor RaymondY.K.Lau

09/2022-12/2022

- **Independently** collected an enhanced datasets covering two crowdfunding platforms, Kickstarter and Indiegogo (about 68,000 video text meta pairs).
- Extracted text sequence and video frame features based on pre-trained BERT and I3D networks and represented audio features by MFCC respectively.
- Independently designed the first multi-modal framework fortext, audio, video signals as well as metadata to learn complementarity among different modalities. Unaligned text and video by cross-attention blocks.
- Through multi-card training, accuracy is improved 4.3%, f1-score up 6.5%. The framework can also be applied in social media, customer service and other scenarios where multi-modal signals exist.

# Individual Project: Cryptocurrency Market Sentiment and Price Forecasts

HK, China

## Instructor: Professor Raymond Y.K.Lau

09/2022-12/2022

- Collected 190,000 tweet comments about cryptocurrency by calling Twitter API.
- Extracted semantic features based on 100-dimensional Glove and BERT\_base respectively, and classified sentiment based on three popular language models, TextCNN, BiRNN and fine-tuning BERT, to obtain high semantic sentiment information about tweets.
- Combined with historical price of Bitcoin, used Ridge regression to fit the closing price.
- Visualized regression results for the MSE minimum model, 76% (295 days) of the time series can be accurately fitted (prices fluctuate within 4%).

## **Group Project: Construction of Online Novel Reading Database**

HK,China

### Instructor:Professor JianMA

09/2022-12/2022

- This project aims to develop an online novel reading platform, where users can browse, searchand read various novel chapters in the form of account points redemption.
- Mainly responsible for the design of the database framework use SQL. Standardize the
  definition of data tables and used indexes to optimize the query performance of the database and
  establish related views.

### Honors&Awards:

The University-level MeritStudent Scholarship (top10%)	2018
The Scholarship of Jiangsu Province	2019
The Excellent Summer Exchange Student of PurdueUniversity	2019
The Silver Award of CYC Mathematical Modelling Competition	2020
The Third prize of the 5th China Undergraduate Life Science Contest	2021
The Excellent Data Investigators of CFPS2020, CLES2021	2021
The Host of National College Students Innovation Training Project (Province Level),	2021
The Excellent Graduates of Nanjing Agricultural University	2022

### Technical Skills:

## Programming language:

Familiar with python, SQL, R, Tableau, PyTorch and TensorFlow

## **Machine Learning:**

Skillfully reproduce a variety of classical NLP models (Word2vec, GRU, LSTM, Transformer, GPT, ELMO, BERT); video understanding and multi-modal models (ResNet, Two-Stream Network, I3D, CLIP, ViLT, etc.);

Familiar with basic machine learning algorithms (LRandrelated improvements, tree models and ensemble methods, SVM, Bayes and clustering algorithms, etc.)

### Data structure:

Master the basic data structure (array, linked list, stack, queue, binary tree, graph, etc.) and sort search, dynamic programming, etc.