

# ZHIYUAN LIU

School of Information, Renmin University of China, Beijing, China  
+86 18811539603 | zhiyuanliu0903@ruc.edu.cn

## EDUCATION

<b>Renmin University of China</b> Master in Management Science and Engineering	Beijing, China Sept. 2021 - June 2024 (expected)
<ul style="list-style-type: none"><li>GPA: 3.95/4.00</li><li>TOEFL: 106; GMAT: 710</li><li>Relevant Coursework: Research Methodology for Management, Modern Statistic Methods, Social Networks Analysis, Business Data Analytics, Knowledge &amp; Innovation Management, Models and Decision</li></ul>	
<b>Renmin University of China</b> Bachelor in Computer Science and Technology	Beijing, China Sept. 2017 - June 2021
<ul style="list-style-type: none"><li>GPA: 3.57/4.00</li><li>Minor in Finance</li><li>Relevant Coursework: Advanced Algebra, Mathematical Analysis, Algorithmic Analysis and Design, Big Data Analysis and Finance, Statistics, Operations Research, Econometrics, Finance, Affective Psychology</li></ul>	
<b>Girton College, University of Cambridge</b> Summer Programme	Cambridge, UK Aug. 2019 - Sept. 2019

## RESEARCH INTEREST

- Topics: Business Analytics, Social Media Analytics, Multimodal Data Analysis, Artificial Intelligence
- Methodologies: Machine Learning, Data Mining, Deep Learning, Econometric/Statistical Analysis, Natural Language Processing

## PUBLICATIONS

- Liu, Z.**, Xu, W., Zhang, W., & Jiang, Q. (2023). An emotion-based personalized music recommendation framework for emotion improvement. *Information Processing & Management*, 60(3), 103256.
- Liu, Z.**, Liu, Y., Yan, Z., Yi, Z., & Zhang, W. (2023). *Visualization performance evaluation of analyst reports*. In The 16th China Summer Workshop on Information Management (CSWIM), Changsha.
- Liu, Y., **Liu, Z.**, Zhang, W. (2023). *Integrating the IPO roadshow performance for companies' business success prediction*. In The 8th International Conference on Smart Finance (ICSF), Dubai.
- Zhang, W., **Liu, Z.**, Liu, Y., Yan, Z., & Yi, Z. (2023). *The power of visualization on making high-quality business analytical reports: A multi-dimensional analysis*. In INFORMS Annual Meeting 2023, Phoenix.

## PAPERS IN PREPARATION

- Is information standardization helpful in communication? Evidence from online healthcare consultation. Under review at *Internet Research*. With Wang, X., Huang, T., Zhang, W., Zeng, Q.
- A fusion method to predict IPO success incorporating CEO's road show performance. Targeted Journal: *INFORMS Journal on Computing*. With Liu, Y. and Zhang W.
- Does appearance matter for physicians? A multi-dimensional study on online healthcare consultation. With Wang, X., Huang, T., Zhang, W.

## RESEARCH EXPERIENCE

<b>Multi-dimensional evaluation for analytical reports</b> <i>Team Leader, Advised by Prof. Zhihong Yi, Renmin Business School, and Assoc. Prof. Wenping Zhang, Renmin Information School</i>	Oct. 2022 - Present
<ul style="list-style-type: none"><li>Constructed an innovative model to evaluate the information quality of analytical reports.</li><li>Developed algorithms of text analysis and image understanding to calculate some of the indicators. Established empirical study on real data from Wind to verify the effectiveness of our model.</li><li>Led a 5-person research team of the School of Information in collaboration with students from the Business School.</li><li>Some results of visualization performance evaluation presented at <i>CSWIM2023</i> and <i>INFORMS2023</i>.</li></ul>	
<b>Incorporate latent content in video for business performance evaluation</b> <i>Research Assistant, Advised by Assoc. Prof. Wenping Zhang, Renmin Information School</i>	Oct. 2022 - Present
<ul style="list-style-type: none"><li>Used hidden information from speakers' micro-expressions, body language, and speech mode through videos to predict business performance.</li></ul>	

- Initial results presented at *ICSF2023*.

### **Multi-dimensional study on online healthcare consultation**

Aug. 2022 - Present

*Research Assistant, Advised by Assoc. Prof. Wenping Zhang, Renmin Information School, and Prof. Huang Tao, Peking University*

- Conducted a systematic investigation into the impacts of physicians' photographs on patients' whole decision-making processes, namely search, selection, and evaluation online.
- Constructed a four-dimensional facial impression model and verified the effectiveness of our proposed model on the data from one of the largest online healthcare platforms.

### **Music recommendation for emotion improvement**

June 2022 - Jan. 2023

*Student Researcher, Advised by Assoc. Prof. Wenping Zhang, Renmin Information School*

- Designed an LSTM-based model to select the most suitable and helpful music based on users' mood in the previous period and current emotion stimulus.
- Applied empirical experiments and user studies to prove that our novel framework is precise and helpful.
- Has been published on *Information Processing and Management* as the First Author

### **Clickbait detection based on knowledge graph**

Sept. 2021 - Mar. 2022

*Research Assistant, Advised by Assoc. Prof. Wenping Zhang, Renmin Information School*

- Constructed knowledge graphs using news titles and content, and used GNN to detect clickbait.
- Generated objective abstract automatically, then conducted a semantic comparison with the given title to infer clickbait.

### **Short video understanding based on data augmentation**

Nov. 2020 - May 2021

*Student Researcher, Advised by Prof. Wei Xu and Assoc. Prof. Wenping Zhang, Renmin Information School*

- Drew inspiration from text and image data augmentation and proposed a new video data augmentation method to better identify the features of short videos.
- Brought a certain improvement of 2% in the accuracy of short video understanding.

## **WORK EXPERIENCE**

### **Aldelo**

Intern, Computer Programmer

Beijing, China

July 2021 - Sept. 2021

- Applied Mask R-CNN model to food category identification.
- Constructed and maintained food database that promoted model updates and accuracy improvements.

## **AWARDS AND HONORS**

### **Renmin University of China**

- Excellent Students Awards, the First Scholarship for Excellent Academic Performance (2021-2022), and the Third Scholarship for Excellent Academic Performance (2018)
- Honorable Mention in Mathematical Contest in Modeling (2020), Second Prize in Beijing in China Undergraduate Mathematical Contest in Modeling (2019)

## **ADDITIONAL INFORMATION**

### **Additional Professional and Extracurricular Experiences**

- Counselor for undergraduate freshmen. Provide them with academic and psychological support during the first two years (Sept. 2021 - June 2023)
- Tutor in the course of business data analytics (Sept. 2022 - Jan. 2023)

### **Computer Skills**

- Python (proficient), MySQL, Matlab, R, and Stata

### **Interests**

- Fiction writing, Psychology (passed the comprehensive examination for basic training of psychological counselors of the Institute of Psychology of the Chinese Academy of Sciences and obtained a certificate in 2023), Swimming, Travelling, and Basketball