MIN ZHANG

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Education

The University of Warwick   **2023.10-Now**
PhD Computer Science   Fully-funded by CS CDT Scholarship   **Coventry, UK**
Research Topic: Large-Scale Graph Mining, Searching and Ranking, Information Retrieval.

Imperial College London   **2020.09-2021.11**
MSc Financial Technology   MSc with Distinction   **London, UK**
Relevant modules: Machine Learning for Economics and Finance (84.78%), Text Mining for Economics and Finance (76.82%), Big Data in Finance 1 (70.19%), Blockchain and Applications (76%), Financial Econometrics in R/Python (79.75%), etc. **(Average score of major courses: 73%)**
Dissertation (74.9%): Stock Prediction based on Financial News using Text Mining Technique

The University of Liverpool   **2018.09-2020.06**
BSc (Hons) Computer Science   First-Class Honours Degree   **Liverpool, UK**
Relevant modules: Introduction to Data Science (74%), Advanced Artificial Intelligence (95%), Computer Vision (94%), Knowledge Represent & Reason (94%), Introduction to Computational Game Theory (88%) Database Development (85%), etc. **(Average score of major courses: 78%)**
Dissertation (72%): "Touching to See" using Generative Adversarial Networks (GANs)

Xi'an Jiaotong-Liverpool University   **2016.09-2018.06**
BSc (Hons) Information and Computing Science   **Suzhou, China**
Relevant modules: Linear Algebra (85%), Multivariable Calculus (85%), Introduction to Programming in Java (85%), Computer System (83%), Algorithmic Foundations and Problem Solving (83%), Data Structures (80%), Physics II: Introduction to Electromagnetism (85%), etc. **(Average score of major courses: 78%)**

Publication

[SIGIR'25] Min Zhang and Weiren Yu. 2025. **UPPR+: Scaling Uncertain Personalised PageRank Computation on Billion-Sized Graphs with Mutually Exclusive Edges.** In Proceedings of the 48th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR '25), July 13–18, 2025, Padua, Italy. ACM, New York, NY, USA, 10 pages. https://doi.org/10.1145/3726302.3730113

M. Zhang, "Analysis and Design of customer relationship management system for rural commercial bank based on artificial technology," *Modern Information Technology*, **vol.6, no.104(14), pp.97-102+109, 2022**
Use text mining, cluster analysis and random forest learning to automatically and efficiently process customer information, detecting default risk and loss risk, and providing customers with precision marketing services and explore more business opportunities.

Research Experience

Imperial College London (Applied Project)   Selected as a Sample AP dissertation   **2021.04-2021.08**
Stock Prediction based on Financial News using Text Mining Technique
- Pre-processed the financial news, share prices, size , P/E ratio, dividend yield and volume of Pfizer Inc.
- Text mining for financial news using Word2Vec and GloVe approach. Train and predict the sentiment analysis
- Predicted stock prices using these feature data with neural network, random forest, SVM models.

The University of Liverpool (Final Year Project)   **2019.09-2020.05**
"Touching to See" using Generative Adversarial Networks (GANs)
- Collected 1000 visual and 1000 tactile images using GelSight sensor and Canon camera
- Built GANs to model tactile images and generate the corresponding visual images, vice versa
- Gained the above 65% similarity between two types of images and the final score of this project is first-class

Awards

- 'Merit Student' of Xi'an Jiaotong-Liverpool University 2017-2018 academic year
- Volunteer Certificate awarded by XJTLU Volunteer Academy and XJTLU Youth League Committee

Work Experience

The University of Warwick (Teaching Assistant, part-time)   **2024.01-Now**

- Teach a lot of modules, such as Optimisation Method, Neural Computing, Computer Security, Data Analytics and Database Systems.

China Minsheng Banking Corp. LTD. (Financial Technology Product Manager, full-time)
2022.7-2023.9

- Analyze and transfer business requirements to the functional requirements.
- Familiar with the existing digital banking "public maintenance funds" special account supervision, "payroll", "fund custody" and "supply chain repayment" product functions, analyze and write requirement documents, draw system interaction diagram.
- Expand unified electronic payment channels, and connect with the order system to design standardized Internet payment webpage.
- Analyze and write the requirement documents of the agent payment component, agent payment document component, transaction anti-duplicate component, company-to-person maximum amount component, intelligent transfer route component, bill statement component and cash management product operation monitoring in the product standardization construction, and draw the corresponding flow chart and prototype demo.

Deloitte Consulting (Shanghai) CO., LTD. (Digital customer business analysis, internship)   **2021.08-2021.09**

- Joined the project of digital customer consulting Project. Discussed requirements of two function parts of customer's system with employees. Analyzed requirements of these two parts. Wrote the detailed requirement documentation.
- Communicated with developers to elaborate on requirements and propose initial approaches and timeline.
- Followed up the progress of development of these two parts and answered any questions from developers about details
- Tested functionalities according to the pre-defined testing case, and reported any error to the developers.

Inner Mongolia Rural Credit Union Bank (IT risk management assistant, internship)   **2019.06-2019.08**

- Participated in data analysis of large amounts of IT risk. Assisted in the establishment of algorithms and risk models to provide theoretical basis and suggestions for the optimization of the company's internal IT risk management strategy. The theoretical and practical models have been widely recognized in the IT risk management team
- Assisted the analysis of IT risk control, designed risk prevention information technology platforms, and design concepts were used in the research
- Wrote the research report entitled *'Explorations and Research On IT Risk Prevention Technology for Small and Medium-sized Banks'*. Won the second prize of the key research project achievements of the provience's rural credit cooperatives in 2019

Agricultural Bank of China Jinqiao Branch (Bank Clerk, internship)   **2017.07-2017.08**

- Assisted in the account information collection. Sorting, archiving and analyzing account preferences which provided a data basis and feasibility, for subsequent customer return visit and financial products recommendation.
- Assisted in bank daily business, and analysis of bank statements to write a weekly newspaper. Gained praise in weekly meeting for weeks, recognised by colleague

Extracurricular Experience

The University of Liverpool (Peer Mentor)   **2019.09-2020.05**

- Helped new students to become familiar with campus, learning missions and living styles. Organised group meeting to share study life and experience
- Attended peer mentor meetings, sharing, learning the culture of the university and spread this to classmates

Xi'an Jiaotong-Liverpool University (iOS Club Member)   **2017.10-2018.02**

- Worked on the project *'Apple-Academic Collaboration and Collaborative Education'*
- Through Apple's Playground software, practiced teaching module using Swift programming language
- Compared the practical experience with XJTLU undergraduate computer's course (Scratch maze game and Lego robot programming course), wrote teaching plan about how to optimize the undergraduate's primary programming courses, and obtain 1000 yuan of personal project bonus

Xi'an Jiaotong-Liverpool University   **2017.05-2017.07**

(Science Innovation Association Augmented Reality (AR) Research Centre Member)
- Developed own AR applications with creative ideas and programming skills

Qidian Social Work Service Centre（Teaching Assistant）   **2017.10-2017.11**
- Volunteered as an assistant teacher for the '4:30 Classroom for Floating Children'
- Answered pupil's questions, communicated with teachers to help improve students' learning ability, and paid attention to their mental health, gave positive guidance

Dare to Dream (AIESEC Volunteer English Teacher)   **2017.06-2017.07**
- With overseas volunteers from all over the world to participate in the three Jiangsu schools' summer English camp
- Participated in the daily course design, according to the students' ages, put forward suggestions about adjusting topics
- Taught students English, introduced multivariate culture of the country, and taught practical English skills, including presentation skills and simple writing skills and improved my communication, presentation and organisation skills

Additional information

- **Computer skills:** Python, R, MATLAB, SQL, Java, C++, PHP, Perl, JavaScript
- **Language skills：** Native speaker of Chinese mandarin, fluent in English