

# Mingzhen MAO

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## EDUCATION

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### SINGAPORE MANAGEMENT UNIVERSITY, LKCSB

Singapore | SG

*Ph.D. in Business (Operations Management)*

Aug 2023 – Current

- Study foundations of operations management, especially Deterministic Inventory Models and Stochastic Inventory Models, and dealing with uncertainty in Inventory Optimization
- Learn basic introduction to Business Research, economic theory of organization and social science theories
- Plan in intelligent systems using graph theory, heuristic search, and reinforcement learning

### UNIVERSITY COLLEGE LONDON, SCHOOL OF MANAGEMENT

London | UK

*Master of Science in Business Analytics (Distinction)*

Sep 2020 – Dec 2021

- Applied multiple marketing analytical tools, such as CLV, RFM, churn management methodology, and causal inference, to solve data-based problems of different companies across various industries
- Conducted Random Forest, SVM, kNN, and other predictive models to process data and make predictions. Performed optimization, simulation, and decision tree models to achieve decision and risk analysis
- Researched independently and drew conclusions that would increase work efficiency and user loyalty

### UNIVERSITY OF LIVERPOOL

Liverpool | UK

*Bachelor of Science with Honours in Mathematics (Class I)*

Sep 2018 – May 2020

- Decrypted text generated by substitution cipher using Metropolis-Hastings algorithm
- Solved practical optimization problems applying net in theory and provided optimization suggestions
- Generated modeling in microeconomics and population dynamics

### XI'AN JIAOTONG-LIVERPOOL UNIVERSITY

Suzhou | CHINA

*Bachelor of Science in Applied Mathematics*

Aug 2016 – June 2018

- Established library management system by Java programming in order to arrange visitors and books
- Built models of species density with accuracy level higher than 85% and predicted future density change with potential disturbance
- Assessed company's KPI and external resources and achieved Outstanding Award in IBSS Data Analytics and Business Strategy Competition

## RESEARCH EXPERIENCE

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### NANYANG TECHNOLOGICAL UNIVERSITY

January 2023 – June 2023

- Conducted literature survey, data collection, data analysis, model assignment, report writing, and paper publication work in operations management field
- Deepened perception in operations management, statistical modeling, and research methodologies

### PEKING UNIVERSITY HSBC BUSINESS SCHOOL

August 2022 – January 2023

- Joined research programs of Dr. Chuang Tang in marketing field, during which undertaking jobs as data collection, data process, literature review, and causal inference model setting
- Promoted abilities in transaction assignment and time management; developed skills in programming and model designing; enhanced understanding in defining marketing topics and analyzing causal inference

### UNIVERSITY COLLEGE LONDON, SCHOOL OF MANAGEMENT

March 2021 – July 2022

- Worked on data-driven marketing-related topics under supervision of Dr. Wei Miao in UCL School of Management during postgraduate study; participated in researches in marketing and finance fields, and helped with data processing and model setting following Dr. Wei Miao after graduated
- Improved insights in customer analysis, predictive analysis, and data processing; exposed to diverse research directions in marketing

## SKILLS & INTERESTS

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- **Programming Languages:** Python, R, SQL, Java
- **Research Tools:** Jupyter Notebook, RStudio, Stata, LaTeX, Zotero, Tableau, MySQL, SPSS, Matlab, Minitab, Maple, MS Office
- **Languages:** Mandarin (native), English (advanced), Japanese (basic)
- **Interests:** Reading sci-fi and detective fiction, playing guitar and saxophone, cooking, and travelling