Curriculum Vitae

Associate Professor Zhang Meilin

Head, Master of Analytics and Visualisation Programme

School of Business

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Education Qualifications

Aug 2009 - Mar 2015	PhD (Management), National University of Singapore, Singapore
2009	M.S., Computer Science, Beijing University of Posts and Telecommunications, Beijing, China
2006	B.S., Software Engineering, Beijing University of Posts and Telecommunications, Beijing, China

Academic and Professional Experience

2021 - Present	Senior Lecturer, Analytics Programme, SUSS Business School
2017 - 2020	Lecturer, Analytics Programme, SUSS Business School
2015 - 2017	Research Fellow, Global Asia Institute, National University of Singapore

Memberships and Professional Activities

2013 - Present	MSOM
2010 - Present	Member, INFORMS
2022-Present	MC Member of Operations Research of Singapore Society (ORSS)
2019-2022	Management Committee of ORSS, Honorary Treasurer, Asst. Honorary Secretary

- Ad-hoc Referee for the following journals:
  - Management Science, Operations Research, European Journal of Operations Research, Automatica, Computers of Operations Research

Research Interests

- Methodologies:
  - Robust Optimization
  - Stochastic Optimization for Decision Making under Uncertainty

- - Large Scale Computation
  - Deep Reinforcement Learning
- Applications and Software:
  - Sharing Economics, Sustainable Operations Management
  - On-demand Platform Strategy
  - Healthcare Analytics
  - Robust Optimization Software (C++ APIs)

Selected Publications

Selected Journal Articles (Refereed)

- Satisficing Approach to On-Demand Ride-Matching, with Dongling Rong, Xinyu Sun, Shuangchi He, accepted with minor changes for Informs Journal on Computing (UTD, ABS4*, SCI).
- Robust Repositioning for Vehicle Sharing, with He, Long and Hu, Zhengyu, Manufacturing & Service Operations Management, 2019, 22(2):241-256. (UTD, ABS4*, SCI)
- Data-driven patient scheduling in emergency departments: A hybrid robust-stochastic approach, with Shuangchi He, Melvyn Sim, Management Science, 2019, 65(9):4123-4140. (UTD, ABS4*, SCI)
- Adaptive Distributionally Robust Optimization, with Dimitris Bertsimas and Melvyn Sim,
- Management Science, 2018, 65(2):604-618. (UTD, ABS4*, SCI)
- A Robust Optimization Model for Managing Elective Admission in a public hospital, with Fan- wen Meng, Qi Jin, James Ang, Singfat Chu, Melvyn Sim, Operations Research, 2015, 63(6), 1452- 1467. (UTD, ABS4*, SCI)
- Improvement in Management System of Color Ring Back Tone Service, in Chinese with Wang Chun, Liao Jianxin, Computer Systems & Application, 2009, 18(3), 23-26. (SCI)

Working Papers

- Lessons for Implementing Marketing AI in a Business-to-Business Context, with Willie Low, Rohit Nishant, under 3rd round review for MIS Quarterly Executive (Impact Score 6.35, SSCI) .
- An Integrated Order Dispatch Approach for Dynamic Ride Pooling and Hailing Services, under review for Production and Operations Management (UTD, ABS4*, SCI) .
- A Practical Approach for On-Demand Ride-Matching with Order Cancellation, under review for Production and Operations Management (UTD, ABS4*, SCI).
- A Data-driven Time-Constraints Order Dispatch Method for On-demand Food Delivery, with Dongling Rong, Xinyu Sun, submitting to Manufacturing & Service Operations Management, 2020, 22(2). (UTD, ABS4*, SCI).

Book Chapters

- Covid-19 New Normal. World Scientific ISBN: 978-981-125-515-1. Chapter 4 "Transformation and Reshaping of Industrial Supply Chains in the Post-Pandemic Era"(pp 59-72)

Analytics Software Product and Tools

- Cloud Analytics for Teaching and Research: integrated data mining, optimization, simulation toolkit Jan - June. 2020
    - A complete tutorial guide for learning predictive and prescriptive analytics
    - All embedded with full documented Jupyter Notebooks
    - Rich applications and practice examples
    - Optimization include the integrated use of Docplex and Robust optimization in Python GitHub
- **ROC Solver**: distributionally robust optimzation in C++, May. 2016
    - Coverage of the practical distributionally robust linear optimization and support a wide range of ambiguity set
    - Providing more than 100 extensible APIs with detailed API documentation.
    - Complemented several application test cases: Appointment Scheduling, Inventory Control, Optimizing Hospital Elective Admission and etc.
    - 20000 lines open source C++ code for public use available on my GitHub
- **Discrete Event Simulation Package for Healthcare Operations**, Nov. 2016
    - modeling various process scenarios in hospital processes with open API for optimization strategy
    - Open source C++ code for public use available on my GitHub

Invited Seminar Presentations

- Xi'an Jiaotong University, China   Dec. 2019
- University of New South Wales, Australia   Mar. 2018
- Nanyang Business School, NTU, Singapore   Dec. 2017
- Shanghai Jiao Tong University, China   Dec. 2016
- City University of Hong Kong, China HK   July. 2016

Conference Presentations

- POMS China International Meeting (Hangzhou, China)   2023
- APORS (Asia-Pacific Operational Research Society) 2022, Philippines   2022
- INFORMS Annual Meeting   2013- 2015
- POMS-HK   2016
- Chinese Scholars Association for Management Science and Engineering (CSAMSE)   Annual 2015

Research Projects

- **On Demand Service Platforms** Dec. 2018 - Present
    - Large scale order dispatching with time constraints
    - Efficient ridesharing for independent agents
    - On-Demand Food Delivery Service (Last Mile Order Matching)
- **Omnichannel Retail Operations Management** Dec. 2022 - Present
    - Inventory fulfillment decision-making for an omnichannel retailer
    - A satisficing approach for Omnichannel Product Selection and Shelf Space Planning Optimization
- **Healthcare Operations in Emergency Department, KTPH hospital** Jan. 2013 - Sep. 2014
    - The patient flow process in Emergency & Acute departments of public hospitals in Singapore
    - Discrete event simulation tool for hospital process simulation

Teaching Interests

Course Taught

- Undergraduate Course Modules Taught:
    - ANL201: Data Visualization for Business, Spring 2020.
    - ANL203: Analytics for Decision Making, Fall 2017- Fall 2023.
    - ANL355: Applied Operations Research, Fall 2019 - Jan 2023.
    - ANL488: Applied Capstone Project, Spring ,Fall 2018 - 2023.
    - BUS107: Quantitative Methods, Spring 2018.
    - BUS489: Strategy for Business Management, Fall 2019 - 2023, Spring 2020.
    - BUS490: Business Strategy, Spring 2022 - 2023.
- Graduate Course Modules Taught:
    - BUS551: Harness Technology for Business Innovation, Fall 2018 - 2021.
    - BUS651: Managing Technology and Innovation, Spring 2019.
    - MKT553: Digital Marketing: Search Engine Optimization, Spring 2020 - 2023.
    - MKT554: Digital Marketing: Google Analytics, Spring 2020 -2023.
    - IPM561: Contemporary Topics in Technology and Business, Spring Fall 2021 -2023.
    - FIN599: Applied Project for Master of Finance, 2019, 2022.
    - DBA799: DBA Doctoral Dissertation, 2020 - 2022.
- Executive Management Program (EMP):
    - Artificial Intelligence: Implications for Business Strategy, Spring 2018 - 2023.
    - Technologies impacting financial institutions: AI and Cloud Computing, Fall 2018.

PhD and DBA Students Supervision

- DBA Supervision:
    - Willie Low, January 2020 - July 2022, Graduated

- Co-Supervision of PhD students:
  - Rong Dongling (Xi'an Jiaotong University), Sep 2019 - July 2024 (expected), Thesis "On-demand order matching for Service Platform"

Updated on 21 September 2023