

Curriculum Vitae



Dr Liu Wenting

Head, Artificial Intelligence for Business Programme
School of Business

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Education Qualifications

2014	PhD, Industrial Systems Engineering and Management, National University of Singapore
2008	MSc, Information Systems, Beijing University of Aeronautics and Astronautics

Academic and Professional Experience

2023 - present	Head, Artificial Intelligence for Business, Singapore University of Social Sciences
2019 - 2022	Senior Lecturer, Singapore University of Social Sciences
2017 - 2019	Director, Revenue Management Solutions, Singapore
2013 - 2017	Business Analytics Manager, Procter & Gamble, Singapore
2008 - 2012	Research Scholar, National University of Singapore, Singapore

Memberships and Professional Activities

- The Academic Council of the Risk and Insurance Management Association of Singapore (RIMAS) (actively involved in advancing risk-focused education and certification initiatives, encompassing various areas such as AI Risk, Cybersecurity, Sustainability, Green Data Center Risk, Generative AI Risk, among others.)
- Reviewer, Asia Pacific Journal of Information Systems
- Reviewer, Electronic Commerce Research and Applications
- Reviewer, International Journal of Internet Marketing and Advertising
- Reviewer, Journal of Electronic Business & Digital Economics

Consultation and Executive Experience

Utilizing Big Data and Machine Learning Models for Pricing in the Food and Beverage Industry, with Revenue Management Solutions, 2019

- Predict price elasticities using big data, discrete choice models and Markov chain Monte Carlo model
- Develop recommender engine on next best purchase by collaborative filtering

- Optimise profitability using genetic algorithm based quadratic optimisation model

Research Interests

- Natural Language Processing/Natural Language Inference/LDA/ABSA/BERT
- Deep Learning and Image Recognition Model
- Machine Learning Models (gradient boosting machines, random forest, recommender engine)
- Genetic-algorithm-based Quadratic Optimisation Model
- Multivariate Time Series/Vector Auto Regression (VAR)

Selected Publications

Journal Papers:

- Zhang Y., Ren J., **Liu W.**, Ding, D., Int. J. of Data Analysis Techniques and Strategies, accepted.
- Mou, J., **Liu, W.**, Guan, C., Westland, J. C., & Kim, J. (2024). Predicting the cryptocurrency market using social media metrics and search trends during COVID-19. *Electronic Commerce Research*, 1-27. <ABDC rating: A; Impact Factor 3.5>
- Guan, C., **Liu, W.**, Yu, Y., & Ding, D. (2024). Tokenomics in the Metaverse: understanding the lead-lag effect among emerging crypto tokens. *Financial Innovation*, 10(1), 88. <Impact Factor 6.8>
- Lin, H., Wu, S., Zhang, S., & **Liu, W.** (2023). Design of Reverse Network for Recyclable Packaging Boxes under Uncertainties. *Sustainability*, 15(15), 11781. <Impact Factor 3.9>
- Guan, C., Hung, Y. C., & **Liu, W.** (2022). Cultural differences in hospitality service evaluations: mining insights of user generated content. *Electronic Markets*, 32(3), 1061-1081. < ABDC rating: A; Impact Factor 8.5>
- Guan, C., **Liu, W.**, & Cheng, J. Y. C. (2021). Using social media to predict the stock market crash and rebound amid the pandemic: the digital 'haves' and 'have-mores'. *Annals of Data Science*, 1-27. <Impact Factor 3.4>
- Ding, D., Guan, C., Chan, C. M., & **Liu, W.** (2020). Building stock market resilience through digital transformation: using Google trends to analyze the impact of COVID-19 pandemic. *Frontiers of Business Research in China*, 14(1), 1-21. <Impact Factor 5.5>

Books/Book Chapters:

- **Liu Wenting** (2021). Digital Payment, in Lee David Kuo Chuen, Ding Ding & Guan Chong. (Eds). *Financial Management in the Digital Economy* (Singapore University of Social Sciences - World Scientific Future Economy Series). vol. 6, World Scientific Publishing.

Conference Papers:

- Wang, W. J., Wu, C. K., **Liu, W.**, Hung, Y. C., Ren, J., & Horng, J. T. (2023). Public Sentiment Toward ChatGPT on Social Media X: An Evidence of Mixed Emotions. 34th Australasian Conference on Information Systems, Wellington, New Zealand, Dec 5-8.

- Chang, H. and **Liu, W.** (2023). Balancing Short-Term Earnings Pressure with Long-Term Socially Responsible Behavior: An Examination of Managerial Cognitive Biases. 15th CEA (Europe) and 34th CEA (UK) 2023 Annual Conference, Gottingen, Germany, Jul 14-16.
- Hung, Y., Ding D., **Liu W.**, Guan, C. (2022). Overjoyed By Customised Service? The Role Of Individualism, Australian & New Zealand Marketing Academy (ANZMAC) 2022, Perth, Australia, Dec 5-7.
- Ren J., Zhang Y., **Liu W.**, Lo S. (2022). Is All-Win Possible? A Novel Recommendation System for Music NFT Platform, The 22nd International Conference on Electronic Business (ICEB) 2022, Bangkok, Thailand, Oct 13-17.
- Mou Jian, Guan Chong, & **Liu W** (2021). Predicting Cryptocurrency Market Using Social Media Sentiments and Search Trends during Covid-19. The 22nd International Conference on Electronic Commerce (ICEC 2021), Chengdu, China.
- Xiao Tong Yu, Guan Chong & **Liu W** (2019). Marketing Strategy of Organic Agricultural Products on E-Commerce Platforms, ICEB 2019 Proceedings.
- **Liu W**, Chai Kah-Hin (2010). Identifying and measuring Reach and Richness: Toward a knowledge sharing mechanism selection model. Portland International Conference on Management of Engineering and Technology 2010, Phuket, Thailand

Research Grant

- MOE Start-up Research Funding, Free-to-Play or Play-to-Earn? Understanding GameFi's Mass Players and Market using Text Analytics. Co-Principal Investigator. 31 July 2023 to 30 June 2024. Reference number: RFE23006
- MOE Start-up Research Funding, Is All-Win Possible? A Novel Recommendation System for Music NFT Platform, Co-Principal Investigator, Sep 2022 to Mar 2024

Invited Seminars/Talk

- "Unleashing Creativity: Exploring Generative AI for Business Innovation", SkillsFuture Festival@IHL 2024, July 29, 2024
- "Unravelling Donor Engagement on Donation-based Crowdfunding platform", WWF Singapore, Jul 26, 2023
- "Unleashing the Future: Blockchain and AI in Entertainment", SkillsFuture Festival@IHL 2023, Aug 3, 2023
- "Analytics-driven pricing strategy in big data context", Critical Core Skills Workshops, Lifelong Learning Institute & HeadHunt, 2020
- "Big data driven pricing strategy", Department of Economics, National University of Singapore, 2019
- "Price sensitivity measurement via MCMC and Bayesian Modeling", School of Management, Zhejiang University, 2018