ISME-UMSO 2022

The 18th International Symposium on

Management Engineering &

Unconventional Modelling, Simulation and Optimization

December 17-18



Welcome

This is the eighteenth symposium organized by International Society of Management Engineers (ISME international) to discuss on the present state of arts of "Management Engineering." Welcomes scholars seeking to acquire a deep understanding of innovation and knowledge theory and practice and aims to attract a leading international professional to share ideas on frontier topics concerning Digital technology, Modeling and simulation, Artificial intelligence and Machine learning, Environmental protection, New market finance and trade, Entrepreneurship and management, Sustainable development analysis and Fintech analysis, to promote profession advancement through collaboration on tools, processes, and methodologies, and to provide a platform for further communications among

Call for Papers

√ General Chairs

Prof. Junzo Watada Waseda University, Japan

researchers. Please visit the following link for more detail: http://ismeip.org/files/CFP_ISME_UMSO2022.pdf.

■ Prof. Xiuwu Zhang Huaqiao University, China

Prof. Wenqi Duan Taizhou University, China

√Submission of Your Paper

Important Date			
Abstract Submission March 01 – Sept. 30, 2022 Final manuscript submission Sept. 01 – Nov. 30, 2022			
Notification of acceptance Sept. 01 – Nov. 30, 2022 Registration Fee: Free (On line)			

Papers are invited from prospective authors with interest on the related areas. Each paper should be written with title, authors' names, affiliation, email addresses, and 150-words abstract with keywords, and a one-column body in 12 pts. All papers **MUST** be submitted electronically in PDF format only via: issme2022@aliyun.com.

Papers Presented at the conference will be selected for publication in: Technological Forecasting and Social Change(Indexed by SSCI), Journal of Innovation & Knowledge(Indexed by SSCI), Economic Research-Ekonomska Istraživanja(Indexed by SSCI), Int. J. of Environmental Research and Public Health (Indexed by SSCI), Emerging Markets Finance and Trade (Indexed by SSCI) and J. of Advanced Computational Intelligence and Intelligent Informatics (Indexed by EI/ESCI).

√Sponsored, Cosponsored & Supported by



Huaqiao University



Waseda University



International Society of Management Engineers



Taizhou University



Zhejiang Association of Quantitative Economics



Journal of Advanced Computational Intelligence and Intelligent Informatics

ISME-UMSO 2022 PROGRAM SCHEDULE

December 17 9:00-9:25	Chaired by: Juying Zeng Zhejiang University City College, China	(Tencent Meeting ID: 248450081) Opening Ceremony Xindong Zhao, Huaqiao University, China Ye Yong, Taizhou University, China
December 17 9:30-10:15	Chaired by Juying Zeng Zhejiang University City College, China	Keynote A Social Choice for Sustainable Environment Problems, and Building Fuzzy Transitivity Relation Junzo Watada Waseda University, Japan
December 17 10:20-11:05	Chaired by Xiuwu Zhang Huaqiao University, China	Keynote B Causal Relationships between China's INE and the International Mainstream Crude Oil Futures Prices Takashi Tamamine Kagawa University, Japan
December 17 11:10-11:55	Chaired by Wenqi Duan Taizhou University, China	Keynote C Revisiting safe-haven properties of gold and Bitcoin for crude oil and global stock markets: New evidence from COVID-19 crisis Yufeng Chen Zhejiang Normal University, China

TIME	Session 1 (Tencent Meeting ID: 653218117) Chair: Yanwu Chen Assistant:Zezhong Hao, Haiming Ding	Session 2 (Tencent Meeting ID: 155833421) Chair: Tingting Wang Assistant: Jiangying Wei, Chao Dai
	Industrial Chain Map and Linkage Network Characteristics of China's Digital EconomyYanwu Chen, Haiming Ding, Jun Ma	Heterogeneous Learning of Functional Clustering Regression and Application to Chinese Air Pollution DataWang Tingting, Qin Linjie, Dai Chao, Wang Zhen, Gong chenqi
	The Impact of Industrial Digitalization on Quality Structure of LaborZezhong Hao, Xiuwu Zhang	On the nexus between digital financial inclusion and entrepreneurship promotion in China: Evidence from a quasi-natural experiment analysisHongcheng Shen, Zhixiong Gao, Yenching Chuang
December 17 14:00-16:30	Digital Technology, R&D Innovation and Carbon Emissions: Evidence from ChinaYajun Liu, Yang Shen	Can Big Data Empower Green Total Factor Productivity: Based on the Quasi-natural Experiment of the Big Data Experimental ZoneJiangying Wei, Xiuwu Zhang
	The impact of digital transformation on low-carbon development of manufacturing in ChinaYanfang Lyu, Leifeng Zhang, Dong Wang	Media-Corporation Relationship and Innovation in China: Help Hand or Hinder HandYu Shen
	Empirical Analysis on the Impact of Restrictive Risks on China's Digital Services Trade LevelYanfang Lyu, Ruonan Fang, Dong Wang	A study on the diagnosis and aggregation properties of multiple exchange rate bubbles in BRICS countriesWuliu Zhang, Qing Lv

TIME Session 3 (Tencent Meeting ID: 7723537944) Chair: Jian Wang Assistant: Yang Shen, Liuchen Lai		Session 4 (Tencent Meeting ID: 757893905) Chair: Qi Xiong Assistant: Leifeng Zhang, Hang Yuan
	Digital economy and factor market distortion: An empirical study of China's provincial panel dataYanfang Lyu, Yun Xiang, Dong Wang	Research on price support policy effect in China from the perspective of food securityCui Li, Xiaoqing Xie
	Analysis of the Spatial Impact of Chinese Provincial Innovation Efficiency on Green High-quality DevelopmentYanwu Chen, Jun Ma, Haiming Ding	Empirical Analysis of Key Industrial Policy's Effect on Export of the Manufacturing in ChinaBingqiang Li, Hongchun Lin, Jinzhi Li, Jing Yu, Xi Li, Jinzhou Lu, Chengbin Wang
December 17 14:00-16:30	Regional disparity and Convergence of China's Economic and Innovation Development: Based on Functional Data AnalysisDejin Zhao, Xiaming Tu, Xindong Zhao	Financial Cycle and Effectiveness of Monetary Policy: A Comparative Study of Quantity-Based and Price-Based InstrumentsXiaoqin Zheng, Wenli Xu, Dan Huang
	The impact of Belt and Road Initialtive on S&T innovation efficiency and its spatial spilloverJian Wang	RCEP and China: An application of GE-PPML model to goods, services, and value chainsQi Xiong
	Economic policy uncertainty, total factor productivity and net technical complexity of exports-From export market heterogeneity perspectiveChengying He, Bao Feng, Ruijin Guo, Chengshuang Lv	Transmission network of structural shocks with an application to China's monetary policy shocksMucai Lin, Hang Yuan

TIME	Session 5 (Tencent Meeting ID: 896335792) Chair: Yanfang Lyu Assistant:Linhui Zhao, Xiaoyang Guo	Session 6 (Tencent Meeting ID: 941549535) Chair: Zeyang Li Assistant: Weicong Wu, Yanting Xiong
December 17 14:00-16:30	Environmental regulation, innovation factor agglomeration and green economic efficiencyXiaoyang Guo, Zhang Xiuwu	Middle-aged and elderly parental care for married children and willingness to give birth to the second child — Empirical test based on CFPS2018 Weicong Wu, Xindong Zhao
	Indirect Economic Losses Evaluation of Flooding Using Input-Output Analysis: An application to China's Jiangxi ProvinceYanfang Lyu, Yun Xiang, Dong Wang	The Impact of Population Aging on the Upgrading of Tertiary Industry internal StructureDan Tang
	Does Increasing Social Expenditure slow the long-term economic growth rate - Evidence from ChinaWeize Xiao	Research on the Influence and Mechanism of Charitable Donation on Individual Income InequalityHexin Wu, Xiuwu Zhang
	Analysis on the channel and heterogeneity of the impact of China-US trade frictions on China's trade interests Yanfang Lyu, Linhui Zhao, Dong Wang	The Impact of Individual Heterogeneity on Household Asset Choice: An Empirical Study Based on CFPSZeyang Li, Luyi Shen
	The impact of regional business environment on the innovation capability of enterprises in the context of DigitalizationCui Li, Mingwang Hou, Yihui Peng	Housing Price Impact and Enterprise Investment: Entrepreneur Confidence Mediation Perspective Chen Xiaochuan, Su Zhifang, Yang Haiyan
	The Impact of Cultural Industry Development on Residents' Subjective Well-being - An Empirical Analysis Based on CHIP2018 DataYanting Xiong	Degree of Marketization, Government R&D input and Enterprise Innovation LevelJiaqing Zhang, Xindong Zhao

TIME	Session 7 (Tencent Meeting ID: 659937106) Chair: Miao Zhu Assistant: Jiaqing Zhang, Dejin Zhao	Session 8 (Tencent Meeting ID: 782730772) Chair: Wenqi Duan Assistant: Xi Chen
December 17 14:00-16:30	Game Theory Approach to View the Difficulty of Healthcare AccessibilityWeiwei Wang, Futian Weng, Yusheng Chen, Miao Zhu	Reverse Cross-Listing and Valuation Effects: Based on the Perspective of Relative Industry ValuationYing Yu
	Forecasting VaR using the Real-time GARCH models with standardized two-sided Lindley distributionGuanghui Cai, Zhimin Wu	Research on the social network search strategy from the viewpoint of comprehensive influence maximizationShumin Hu
	Quantile Regression Models with Censored Data from Nested Case-Control Studies Huizhen Wang, Zhiping Qiu	Research on Robust Optimization of Aviation Logistics Network under the Impact of COVID-19 Zherui Zhang
	Machine learning-based identification of factors influencing enterprise digital transformationChangpeng Sui, Jiangying Wei	Research on industrial development under dynamic competitionXi Chen
	Spatial and temporal differences and Convergence of China's economic and Innovation Development: Based on functional data analysisXindong Zhao, Dejin Zhao, Xiaming Tu	A Practical Guide: Volatility forecasting in real estate firms of Malaysia before, during and after global financial crisisLeong-Mow Gooi
	Which Should Enterprises Choose: Specialization or Diversification?From the Perspectives of Theoretical and Empirical AnalysisKai Zhao, Yibing Hao, Yusheng Kao	Coordination of logistics service supply chain with the CSR behavior and consumer feedback -Xuehua Ji Shaochuan Fu

TIME	Session 9 (Tencent Meeting ID: 927932843) Chair: Yong Ye	Session 10 (Tencent Meeting ID: 791928400) Chair: Song Chen
	Assistant: Lizhen Huang Realizing the environmentally sustainable environment through the efficiency of the Web 3.0 on the enhancing of the green knowledge sharing and supply chain resilience Ping-Kuo Chen	Assistant: Yaohua Wang The impact of digital inclusive finance on the rural industriesSong Chen, Meixu Ren, Chuanzhen, Li
	Risk Assessment of Production Resumption Based on Multi-Level Fuzzy Evaluation Improved by BWM Ji Kai, Ming Liu	Past Exposure, Risk Perception, and Risk-Taking during a Local COVID-19 ShockChong Liu. Liya Liu. Zhang Lyv
December 17 14:00-16:30	The Allocation Method for Personal Protective Equipment in the Emerging Infectious Disease EnvironmentSha-lei Zhan, Xinyi Gu	Whether green bonds could win a competitive edge on price in China's policy framework for carbon peak and carbon neutrality?Jiale Lian, Xiaohui Hou
	A New Prediction and Optimization for Future Freight Structure Based on Optimal Control Theory after the COVID-19Changxiang Lu	How does competition in the venture capital market affect the success of startup firms? new mechanisms and new evidenceWeiping Liang, Xiangyi Zhou
	Identification of key risk factors and main preventive factors in burnout of orthopaedic surgeons by DEMATEL method Yen-Ching Chuang, Huilin Tang, Chao Liu, Yanjun Jin, Zhong Zhu	Does International Bank Linkages Increase Foreign direct investment?Cheng Yu, Yingfan Ge, Lijuan Xie, Yingfan Ge
	Patient allocation method in major epidemics under fuzzy randomized conditionsYong Ye, Lizhen Huang	Research and Application of Nonlinear Correlation Methods Xiaohui Chen, Li Zhang

		(Tencent Meeting ID: 955221438) Closing Ceremony
December 17 16:30-17:00	Chaired by Junzo Watada Waseda University, Japan	Xiuwu Zhang Huaqiao University, China Wenqi Duan Taizhou University, China Junzo Watada Waseda University, Japan

How to join a Tencent Meeting?

