Benedict Jun MA

Department of Industrial and Manufacturing Systems Engineering The University of Hong Kong (HKU)

♥ R8-25, 8/F, Haking Wong Building, Pokfulam Road, Hong Kong

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EDUCATION

The University of Hong Kong

Hong Kong

PhD in Industrial and Manufacturing Systems Engineering Supervised by Prof. Yong-Hong Kuo & Prof. George Q. Huang

Northeast Forestry University

Harbin, China

BEng in Control Science and Engineering (GPA: 93.5/100, Rank: 1/64)

2020

2024

Awarded China National Scholarship twice

ACADEMIC EXPERIENCE

Mines Paris, PSL University

Paris, France

Visiting Doctoral Student in Center for Management Science Supervised by Prof. Shenle Pan & Prof. Eric Ballot Aug – Nov 2023

Rotterdam School of Management, Erasmus University

Rotterdam, Netherlands

Visiting Researcher in Technology and Operations Management Hosted by Prof. René de Koster

Oct 2023

NHH Norwegian School of Economics

Bergen, Norway

Doctoral Student in Course BEA522 on Rural Logistics Supported by Research Council of Norway Jul – Aug 2023

Hong Kong University of Science and Technology

Hong Kong

Visiting Internship Student in Electronic and Computer Engineering $Supervised\ by\ Prof.\ Weichuan\ Yu$

Jun – Aug 2019

Research Interests

- E-commerce Warehousing, Logistics and Supply Chain Management
- Computational Intelligence, Algorithm Design and Applications

JOURNAL PUBLICATIONS

- * denotes the corresponding author
- E-commerce Warehousing, Market Competition
 - 1. Ma BJ, Kuo YH, Jiang Y, & Huang GQ*. (2023). RubikCell: Toward Robotic Cellular Warehousing Systems for E-Commerce Logistics. *IEEE Transactions on Engineering Management*, Early Access.
 - 2. Ma BJ, Zhang Y*, Liu S, Jiang Y, He Y, & Yan K. (2022). Operational strategies for IoT-enabled Brick-and-Mortar retailers in a competitive market. *Computers & Industrial Engineering*, 173, 108665.
 - 3. Xu TZ, Liu SS, Ma BJ, & Ng AKY*. (2023). Impacts of advertising formation on adopting alternative fuel vehicles in a competitive market. *Transportation Research Part D*, 118, 103673.
 - 4. Liu SS, Hua G*, Ma BJ, & Cheng TCE. (2023). Competition between green and non-green products in the blockchain era. *International Journal of Production Economics*, 264, 108970.

- Machine Learning, Computational Intelligence

- 1. **Ma BJ***, Liu S, & Heidari AA. (2022). Multi-strategy ensemble binary hunger games search for feature selection. *Knowledge-Based Systems*, 248, 108787.
- 2. Ma BJ, Pereira JLJ, Oliva D, Liu S, & Kuo YH*. (2023). Manta ray foraging optimizer-based image segmentation with a two-strategy enhancement. *Knowledge-Based Systems*, 262, 110247.
- 3. Pereira JLJ, **Ma BJ***, Francisco MB, Junior RFR, & Gomes GF. (2023). A comparison between chaos theory and Lévy flights in sunflower optimization for feature selection. *Expert Systems*, 40(8), e13330.
- 4. Pereira JLJ, Francisco MB, de Almeida FA, **Ma BJ***, Cunha SS, & Gomes GF. (2023). Enhanced Lichtenberg algorithm: a discussion on improving metaheuristics. *Soft Computing*, 27(21), 15619–15647.

BOOK CHAPTERS

1. Ma BJ*. Hybrid adaptive moth-flame optimizer and opposition-based learning for training multilayer perceptions. (2022). In: Integrating Meta-Heuristics and Machine Learning for Real-World Optimization Problems. Studies in Computational Intelligence. Cham: Springer International Publishing.

Working Papers

- 1. **Ma BJ**, Wang J, Kuo YH*, Huang GQ. "Robotic Order Picking in Cellular Warehousing based on a Time-Space-State Network." *IEEE Transactions on Cybernetics* (Under review).
- 2. Liu SS, **Ma BJ***, Zhang, W, Cheng TCE., Li X. "Eliminating Information Asymmetry in Supply Chains: Blockchain-driven or not." *Transportation Research Part E* (Under Review).
- 3. Wang J, Ma BJ*, Yang Y, Kuo YH, Cheng CH. "Group buying with consumer disappointment at failed deals." Transportation Research Part E (Under review).
- 4. **Ma BJ**, Pan S, Zou B, Kuo YH*, Huang GQ. "Operating Policies for Robotic Cellular Warehousing Systems" *Transportation Research Part E* (In preparation for submission).
- 5. Jiang Y, Li M, **Ma BJ**, Zhao, S, Zhong RY, Huang GQ*. "Digital twin-enabled Out-of-Order (OOO) model for synchronized planning, scheduling, and execution in smart construction fit-out." *Computer-Aided Civil and Infrastructure Engineering* (Under 2nd revision).
- 6. **Ma BJ**, Wang J, Kuo YH. "Dedicated or Shared: How do Third-Patry E-commerce Warehouses Choose?" *Working*. (To be submitted to Production and Operations Management).

RESEARCH GRANTS

- Intelligent Control of Fresnel Lens Spot in Aeroponic Energy-Saving Micro Plant Factory
 National Innovation Training Program for Undergraduates (No. 201810225049), MOE, China
 Principal Investigator, RMB 20,000

 2018 2019
- SynchroHub: Cyber-Physical Internet for Synchronizing Cross-Border Logistics Hubs in the Greater Bay Area (GBA)

Theme-based Research Scheme (No. T32-707/22-N), RGC, Hong Kong Researcher (PC: George Q. Huang), HKD 42.6 Million

2023 - 2028

PATENTS

1. An Intelligent Warehouse Management System with Methods (No. 202210212235.1)

In process

2. A plant factory based on Fresnel lens and ultrasonic atomization (No. CN208211121U)

Authorized

"Dedicated or Shared: How do Third-Patry E-commerce Warehouses	Choose?"
The 33rd Annual POMS Conference, Orlando, USA	May 2023
"RubikCell: Towards Robotic Cellular Warehousing Systems for E-cor The 50th Computers and Industrial Engineering (CIE) Conference, Sharjah-Dub	9
"Robotic Order Picking in Cellular Warehousing based on a Time-Spa The 27th Hong Kong Society for Transportation Studies (HKSTS) Conference, H	
"Operating Policies for Robotic Cellular Warehousing Systems" The 14th POMS-HK International Conference, Hong Kong	Jan 2024
Invited Talks	
"Optimization and Management in Robotic Cellular Warehousing Sys	tems"
Business School, Sichuan University (SCU)	Nov 2023
"Outsourced Order Fulfillment in E-commerce: Warehousing Mode ar	nd Contract Choices"
Business School, Southern University of Science and Technology (SUSTech)	Dec 2023
"Robotic Order Picking in Cellular Warehousing based on a Time-Spa Center for Transportation & Logistics, Massachusetts Institute of Technology (Massachusetts Institute of Technology)	
Teaching	
Teaching Assistant	The University of Hong Kong
• IMSE 4135 Systems Integration (UG) [rating: 80.0/100]	Full Year 2023
• IMSE 3107 Systems Modeling and Simulation (UG) [rating: 81.8/100]	Spring 202
• IMSE 7221 Warehousing and City Logistics (PG) [rating: 94.2/100]	Fall 202
• IMSE 7902 Project Management (PG) [rating: 91.7/100]	Fall 202
\bullet IMSE 7015 Engineering Economics and Finance (PG) [rating: $86.4/100]$	Fall 202
Honor & Award	
Postgraduate Scholarship (PGS) in HKU	2020 - 202
China National Scholarship	2017 & 2018 (Twice
• 2018 International Mathematical Contest in Modeling (MCM)	Meritorious Winne
• 2017 RoboMaster Robotics Competition	Second Priz
Professional Services	
Reviewer for Journals:	
Applied Intelligence Archives of Civil Engineering Archives of Computational Methods in Engineering Computers & Industrial Engineering Evolving Systems Expert Systems with Applications	
IEEE Access	
IEEE Transactions on Naturals Science and Engineering	

IEEE Transactions on Network Science and Engineering

Information Fusion

International Journal of Production Research

Journal of Bionic Engineering

Knowledge-Based Systems

Neural Computing and Applications

PLOS One

Recent Advances in Electrical & Electronic Engineering

Soft Computing

Transportation Research Part E

Reviewer for Conferences:

IEEE International Conference on Robotics and Automation (ICRA 2022) 18th IFAC Symposium on Information Control Problems in Manufacturing

MEMBERSHIP

- Institute of Electrical and Electronics Engineers (IEEE)
- Institute of Industrial and Systems Engineers (IISE)
- Production and Operations Management Society (POMS)
- Institute for Operations Research and the Management Sciences (INFORMS)
- Operational Research Society of Hong Kong (ORSHK)
- International Federation of Operational Research Societies (IFORS)

Referees

• Prof. Yong-Hong Kuo

Assistant Professor at Industrial and Manufacturing Systems Engineering

The University of Hong Kong, Hong Kong

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• Prof. George Q. Huang

Chair Professor of Smart Manufacturing

Department of Industrial & Systems Engineering

The Hong Kong Polytechnic University, Hong Kong

Email: gq.huang@polyu.edu.hk

• Prof. René de Koster

Professor of Logistics and Operations Management

Department of Technology and Operations Management, Rotterdam School of Management

Erasmus University, Rotterdam, Netherlands

Email: rkoster@rsm.nl

• Prof. Shenle Pan

Professor in Sustainable Logistics and Supply Chain Management

Center for Management Science, Mines Paris, PSL University, Paris, France

Email: shenle.pan@minesparis.psl.eu

• Prof. Eric Ballot

Professor of Production and Logistics

Center for Management Science, Mines Paris, PSL University, Paris, France

Email: eric.ballot@mines-paristech.fr