

Benedict Jun MA

Department of Industrial and Manufacturing Systems Engineering
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EDUCATION

The University of Hong Kong PhD in Industrial and Manufacturing Systems Engineering <i>Supervised by Prof. Yong-Hong Kuo & Prof. George Q. Huang</i>	Hong Kong 2024
Northeast Forestry University BEng in Control Science and Engineering (GPA: 93.5/100, Rank: 1/64) <i>Awarded China National Scholarship twice</i>	Harbin, China 2020

ACADEMIC EXPERIENCE

Mines Paris, PSL University Visiting Doctoral Student in Center for Management Science <i>Supervised by Prof. Shenle Pan & Prof. Eric Ballot</i>	Paris, France Aug – Nov 2023
Rotterdam School of Management, Erasmus University Visiting Researcher in Technology and Operations Management <i>Hosted by Prof. René de Koster</i>	Rotterdam, Netherlands Oct 2023
NHH Norwegian School of Economics Doctoral Student in Course BEA522 on Rural Logistics <i>Supported by Research Council of Norway</i>	Bergen, Norway Jul – Aug 2023
Hong Kong University of Science and Technology Visiting Internship Student in Electronic and Computer Engineering <i>Supervised by Prof. Weichuan Yu</i>	Hong Kong 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* (In preparation for submission).
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-Party 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

CONFERENCE PRESENTATIONS

- “Dedicated or Shared: How do Third-Party E-commerce Warehouses Choose?”
The 33rd Annual POMS Conference, Orlando, USA May 2023
- “RubikCell: Towards Robotic Cellular Warehousing Systems for E-commerce Logistics”

The 50th Computers and Industrial Engineering (CIE) Conference, Sharjah-Dubai, UAE	Oct 2023
“Robotic Order Picking in Cellular Warehousing based on a Time-Space-State Network”	
The 27th Hong Kong Society for Transportation Studies (HKSTS) Conference, Hong Kong	Dec 2023
“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 Systems”	
Business School, Sichuan University (SCU)	Nov 2023
“Outsourced Order Fulfillment in E-commerce: Warehousing Mode and Contract Choices”	
Business School, Southern University of Science and Technology (SUSTech)	Dec 2023

TEACHING

Teaching Assistant	The University of Hong Kong
<ul style="list-style-type: none"> IMSE 4135 Systems Integration (UG) [rating: 80.0/100] IMSE 3107 Systems Modeling and Simulation (UG) [rating: 81.8/100] IMSE 7221 Warehousing and City Logistics (PG) [rating: 94.2/100] IMSE 7902 Project Management (PG) [rating: 91.7/100] IMSE 7015 Engineering Economics and Finance (PG) [rating: 86.4/100] 	Full Year 2023 Spring 2023 Fall 2022 Fall 2022 Fall 2021

HONOR & AWARD

• Postgraduate Scholarship (PGS) in HKU	2020 – 2024
• <u>China National Scholarship</u>	2017 & 2018 (Twice)
• 2018 International Mathematical Contest in Modeling (MCM)	<u>Meritorious Winner</u>
• 2017 RoboMaster Robotics Competition	Second Prize

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 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)

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)

REFERENCES

- Prof. Yong-Hong Kuo
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- Prof. George Q. Huang
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- Prof. Shenle Pan
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- Prof. Eric Ballot
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