

# Teng HUANG

Senior Lecturer


Faculty of Business and Economics


University of Auckland

(Updated on May 28, 2026)



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CONTACT INFORMATION <http://teng-huang.com>  
[huangt258@mail.sysu.edu.cn](mailto:huangt258@mail.sysu.edu.cn)

PROFESSIONAL POSITION **University of Auckland** (UoA), Auckland, New Zealand   
May 2026 - present: Senior Lecturer, Faculty of Business and Economics  
**Sun Yat-sen University** (SYSU), Guangzhou, China   
January 2022 - May 2026: Assistant Professor, **School of Business**  
November 2020 - January 2022: Assistant Professor, **Lingnan College**

EDUCATION **University of Connecticut** (UConn), Storrs, CT, United States   
Ph.D., major area: Analytics and Optimization, August 2020  

- Dissertation Title: *On Embedding Advanced Predictive Models into Optimization Models*
- Dissertation Committee: **David Bergman** (chair), **James Marsden**, **Manuel Nunez**, and **Arvind U. Raghunathan**

**Sun Yat-sen University** (SYSU), Guangzhou, China   
Master, Information Science, July 2013  
**Sun Yat-sen University** (SYSU), Guangzhou, China   
Bachelor, Information Management and Information Systems, July 2011  

- Double Major in Archaeology

REFEREED JOURNAL PUBLICATIONS

9. **Huang T.**, Chen F., Fu K.\* (2025). Data-Driven optimization of online coupon targeting, to appear at *Journals of Systems Engineering (in Chinese)*
8. Wei, C., Pang, H., **Huang, T.**, Quan, Z., & Qian, Z. (2026). Predicting Lithium-Ion Battery Health Using Attention Mechanism with Kolmogorov-Arnold and Physics-Informed Neural Networks. *Expert Systems with Applications*, 128969. [\[link\]](#)
7. Hu, J., Xia, L., **Huang, T.**, & Wu, H. (2025). A multi-agent deep reinforcement learning approach for multi-echelon inventory optimization and its application to the beer game. *Transportation Research Part E: Logistics and Transportation Review*, 203, 104367. [\[link\]](#)

6. Feng H., Jia Y., **Huang T.\***, Zhou S., Chen H. (2024). A data-driven approach to outpatient appointment scheduling with heterogeneous service times. *Scientific Reports*, (2024)14:27731. <https://doi.org/10.1038/s41598-024-77873-x> [link]
5. **Huang T.**, Su Q., Yu C.L., Zhang Z.\*, Liu F. (2024). Strategic Team Design: A Data-Driven Analytical Perspective and Its Implications. *Decision Support Systems*, 181(2024):114227. <https://doi.org/10.1016/j.dss.2024.114227> [link]
4. Feng H., Jia Y., Zhou S., Chen H., **Huang T.\***. (2023). A Dataset of Service Time and Related Patient Characteristics from an Outpatient Clinic. *Data*. 8(3):47. <https://doi.org/10.3390/data8030047> [link]
3. **Bergman, D., Huang, T.\***, Brooks, P., **Lodi, A.**, and **Raghunathan, A. U.** (2022). JANOS: Integrated Predictive and Prescriptive Modeling Framework. *INFORMS Journal on Computing*, 34(2):807-816. <https://doi.org/10.1287/ijoc.2020.1023> [link]
2. **Serra, T.\***, **Huang, T.\***, **Raghunathan, A. U.**, and **Bergman, D.** (2022). Template-based Minor Embedding in Chimera Graphs for Adiabatic Quantum Optimization. *INFORMS Journal on Computing*, 34(1):427-439. <https://doi.org/10.1287/ijoc.2021.1065> [link]
1. **Huang, T.**, **Bergman, D.\***, & **Gopal, R.** (2019). Predictive and Prescriptive Analytics for Location Selection of Add-on Retail Products. *Production and Operations Management*, 28: 1858-1877. DOI:10.1111/poms.13018 [link]

SELECTED  
WORKING  
PAPERS

7. Ding, T.R., **Huang, T.**, Zhang, Y.K.\*, Hu X.P. (2026). Correlation-Aware Stowage and Storage Assignment in Robotic Mobile Fulfillment Systems: Optimizing Efficiency and Picker Workload Balance, submitted to *IEEE Transactions on Engineering Management*
6. Qian Z.F.\*, Liang Y.Z., Wang Z.M., **Huang T.** (2026) From Tool to Rival: How Artificial Intelligence Anthropomorphism Reshapes Labor Displacement in Online Marketplace, submitted to *Information Systems Research*
5. Yang H.\*, **Huang T.**, Chen K. (2026). Marrying Theory and Practice: Product Network-Inspired Deep Learning for Sales Forecasting , submitted to *International Journal of Forecasting*
  - Outstanding Papers of the 2nd Annual Conference on Big Data and Business Intelligence Technology
4. **Huang T.**, Zhong C.H., Chen G.\* (2025). Departure Flight Delay Prevention: Embedding Predictive Analytics into Prescriptive Decision Optimization.

3. **Huang, T.**, Shi, N., Wang, S.\*, (2025). Online Inventory Control with Censored Demand: A Neural Network-Based Approach
2. **Bergman, D.**, **Huang, T.**, and **Mathieu, J.** (2019). Data-Driven Optimization for Team Formation
1. Learning Decisions Offline from Censored Observations with  $\varepsilon$ -insensitive Operational Costs

PATENTS

1. Feng H., Chen H., Jia Y., **Huang T.**, Zhou S., Chen C., Li M. (2026). An adaptive decision-making method and system for outpatient appointment scheduling. 2026011400290650

REFEREED  
CONFERENCE  
PUBLICATIONS

2. Xu, Y., **Huang, T.\***, Zuo, Z., Wang, X. Social Media Sentiment and COVID-19 Transmission: Results from a Time-varying SIR Model, Pacific Asia Conference on Information Systems. July 12 - 14, 2021
1. Tan T., **Huang, T.**, Wang, X., Zuo, Z. A Preliminary Investigation of COVID-19 Transmission in the United States by Incorporating Social Media Sentiments The 2020 ASIS&T Virtual Annual Meeting. October 25 - 29, 2020

TEACHING

- Instructor** – Faculty of Business and Economics, University of Auckland
- |                                     |         |
|-------------------------------------|---------|
| BUSINFO709 – Supply Chain Analytics | Q3-2026 |
| BUSAN201 – Data Management          | S2-2026 |
- Instructor** – School of Business, Sun Yat-sen University
- |   |             |
|---|-------------|
| BS5709 – Academic standard and thesis writing   | Spring 2025 |
| BS132 – Python Fundamentals of Data Science   | Spring 2025 |
| BS6290 – Digital Technology and Business Management (with Dr Jinghua Xiao)                    | Fall 2024   |
| BS261 – Big Data and Business Analytics (with Dr Xiaopo Zhuo and Dr Shan Wang)                | Fall 2024   |
| BS5226 – Academic standard and thesis writing   | Spring 2024 |
| BS261 – Big Data and Business Analytics (with Dr Xiaopo Zhuo, Dr Shan Wang and Dr Yanli Tang) | Spring 2023 |
| BF134 – The Programming and Practice (Python)   | Spring 2022 |
- Instructor** – Lingnan College, Sun Yat-sen University
- |   |                                       |
|---|---------------------------------------|
| LN485 – Research Methods in Management Science (with eight other faculty members) | Fall 2021, Fall 2022, Spring 2023     |
| LN3120 – Introduction to Artificial Intelligence                                  | Spring 2021, Spring 2022              |
| LN3121 – Introduction to FinTech (with Dr Yanchu Liu and Dr Junqing Kang)         | Spring 2021, Spring 2022, Spring 2023 |

**Instructor** – Department of Operations and Information Management, University of Connecticut

OPIM 3103 – Business Information Systems Spring 2020

OPIM 3103 – Business Information Systems Summer 2019

- Overall rating of teaching (median): 5.0/5.0

**Teaching Assistant** – Department of Operations and Information Management, University of Connecticut

OPIM 3104 – Operations Management (Prof. Miao Bai) Fall 2019

OPIM 3104 – Operations Management (Prof. Moustapha Diaby) Fall 2018

OPIM 3103 – Business Information Systems (Prof. Alex Tung, Prof. Xue Bai, Prof. Shu He) Fall 2015 – Spring 2018

RESEARCH  
GRANTS

Optimizing Aviation Equipment Replacement Considering Global Climate Policy Chance and Green Updates, *supported by the National Natural Science Foundation of China (NSFC), General Program. PI, 400,000 RMB* 2026.1.1 – 2029.12.31

The Explanability of the Deep Recurrent Neural Network on Inventory Management Processes, *supported by The China Postdoctoral Science Foundation (70th). PI, 50,000 RMB* 2021.7.1 – 2023.6.30

Data-Driven Multi-objective Optimization for Aircraft Line Maintenance Scheduling, *supported by The National Natural Science Foundation of China (NSFC), Young Scientists Fund. PI, 300,000 RMB* 2022.1.1 – 2024.12.31

The Identification of Bottleneck Line Maintenance Events and Line Maintenance Scheduling, *supported by Cyber Logistic Research Centre, The Chinese University of Hong Kong. PI, 142,000 HKD* 2021.8.15 – 2021.12.15

Alignment Mechanism between Talent Cultivation in Application-Oriented Universities and Regional Economic and Social Development: Theoretical Construction, Empirical Assessment, and Optimization Paths, *supported by Department of Education of Guangdong Province (PI: Tinghua Gu). Researcher* 2025.7 – 2026.6

Research on China's Science and Technology Innovation Strategy in Adapting to Climate Change, *supported by Chinese Ministry of Education (PI: Jieyu Li). Researcher* 2021.8 – 2022.12

Research on Project Scheduling of Aircraft Maintenance Base, *supported by Cyber Logistic Research Centre, The Chinese University of Hong Kong (PI: Gang Chen). Researcher* 2021.8 – 2021.12

Management Science Group, Lingnan College, *supported by The Fundamental Research Funds for the Central Universities, Sun Yat-sen University (PI: Jun Lu). Researcher* 2021

Public Opinion on COVID-19 related Policies and Their Economic Impact, *supported by COVID-19's Impact and Policy Studies - Central University of Finance and Economics (PI: Xi Wang). Researcher* 2020 – 2021

Impact Factors of Users Emotion Experiences in Social Commerce, *supported by The National Social Science Fund of China* (PI: Tinghua Gu). Researcher 2018 – 2021

PROFESSIONAL  
SERVICE

**Associate Editor**

- Decision Support Systems April 15, 2021 –

**Specialist**

- Blockchain group, Shenzhen-Hongkong-Macau FinTech Professional Program, Shenzhen Fintech Association March 1, 2021 –

**Session Organizer**

- POMS 35th Annual Meeting (POMS 2025), Atlanta GA, U.S.A. May 8-12, 2025
- POMS 34th Annual Meeting (POMS 2024), Minneapolis MN, U.S.A. April 25-29, 2024

**Session Chair**

- POMS 34th Annual Meeting (POMS 2024), Minneapolis MN, U.S.A. April 25-29, 2024
- POMS 30th Annual Meeting (POMS 2019) (Co-chair: David Bergman), Washington D.C., U.S.A. May 2-6, 2019

**Reviewer**

*Journals/Conferences Reviewed for (#articles reviewed)*

- International Journal for Numerical Methods in Engineering 2026 (1)
- Decision Support Systems (DSS) 2019 (8) 2020 (7) 2021 (9) 2022 (7) 2023 (9) 2024 (8) 2025 (4)
- Journal of Food Safety 2025 (1)
- International Journal of Production Research 2024 (1)
- Computers in Biology and Medicine 2024 (1)
- National Natural Science Foundation of China, Young Scientists Fund 2024 (18) 2025 (19) 2026 (15)
- Service Science 2024 (1)
- ACM Transactions on Quantum Computing 2023 (1)
- 2023 Conference on Information Systems and Technology (CIST 2023) (1)
- INFORMS Journal on Data Science (IJDS) 2023 (1) 2024 (1)
- 2023 62nd IEEE Conference on Decision and Control (CDC) (1)
- Electronic Commerce Research (ECR) 2021 (1)
- 2021 International Conference on Information Systems (ICIS 2021) (1)
- Engineering and Applied Science Research (EASR) 2021 (1)
- INFOR: Information Systems and Operational Research (INFOR) 2021 (1)
- Expert Systems With Applications (ESWA) 2020 (1)
- 2020 International Conference on Information Systems (ICIS 2020) (2)
- The 24th Pacific Asia Conference on Information Systems (PACIS 2020) (2)
- International Journal of Forecasting (INTFOR) 2020 (1)
- The 14th Learning and Intelligent Optimization Conference (LION14) (1)
- The 15th Winter Conference on Business Analytics (WCBA 2020) (1)
- Journal of Optimization Theory and Applications (JOTA) 2019 (1)

- The 29th Workshop on Information Technologies and Systems (WITS 2019) (1)
- 2019 Conference on Information Systems and Technology (CIST 2019) (1)
- 2019 International Conference on Information Systems (ICIS 2019) (3)
- The 2019 INFORMS Workshop on Data Science (DS2019) (1)
- The 16th International Conference on the Integration of Constraint Programming, Artificial Intelligence, and Operations Research (CPAIOR 2019) (1)
- The 15th International Conference on the Integration of Constraint Programming, Artificial Intelligence, and Operations Research (CPAIOR 2018) (1)
- The 31st AAAI Conference on Artificial Intelligence (AAAI-17) (1)

#### Website Chair

- The 25th International Conference on Principles and Practice of Constraint Programming (CP 2019) (Co-chair: Mohsen Emadikhiaiv)

PROFICIENCIES **Programming Languages:** Python, C++, C#, Java  
**Optimization:** Gurobi, or-tools  
**Statistical Programming:** R, STATA, MATLAB  
**Web Programming:** HTML5, CSS, Javascript, jQuery  
**Database:** MySQL, Microsoft SQL Server, Oracle  
**Shell Script**

INVITED TALKS **Data-driven Decision-Making: Methods and Applications**

- Department of Information Systems Management and Analytics, The Warwick Business School, August 5, 2025
- College of Management and Economics, Tianjin University, July 15, 2025
- Department of Information Systems & Operations Management, The University of Auckland Business School, July 15, 2025

**From Data to Decision: the Integration of Operations Research and Data Science in Business Decision-Making**

- MBA, School of Business, Sun Yat-sen University Room 222, No. 6 Lanyuan, 17:10 - 18:00, June 3, 2025

**Data-driven Decision-making Methods**

- Guangdong United Electronic Fee-Collecting Co., Ltd. M202, School of Business, Sun Yat-sen University, 9:30 - 12:00, December 15, 2023

**JANOS: Integrated Predictive and Prescriptive Modeling Framework**

- **School of Business, Lanzhou University** Online, 19:30 - 21:00, November 28, 2023
- **School of Economics and Management, Dalian University of Technology** B205, 9:00 - 10:00am, September 9, 2023

**Optimization with Objective Functions Learned Through Machine Learning**

- **Department of Management, Lingnan (University) College, Sun Yat-sen University** Online, 9:00 - 10:30am, April 30, 2020
- **Department of Management Sciences, Faculty of Engineering,**

CONFERENCE PRESENTATIONS **A data-driven approach to outpatient appointment scheduling with heterogeneous service time**

- 2023 POMS International Conference in China. Hangzhou, China. July 1-2, 2023 (presented by co-author Yiwu Jia), under the title “Appointment Scheduling With Patient Re-entrants: A Data-driven Approach”

**Learning Decisions Offline from Censored Observations with  $\varepsilon$ -insensitive Operational Costs**

- INFORMS Annual Meeting 2024. Seattle, Washington.
- 2024 POMS International Conference in China. Hefei, China. (presented by co-author Minxia Chen)
- POMS Annual Conference 2024, Minneapolis, MN, U.S.A. April 25-29, 2024
- INFORMS Annual Meeting 2023. Phoenix, AZ. October 15-18, 2023
- The 18th INFORMS Workshop on Data Mining and Decision Analytics, Phoenix, AZ. October 14, 2023
- The 2023 INFORMS Workshop on Data Science. Phoenix, AZ. October 14, 2023 (presented by co-author Minxia Chen)
- FinTech · AI and Data Analytics, FAIDA Workshop. Guiyang, Guizhou China. August 14-18, 2023
- 2023 Annual International Conference for Chinese Scholars in Industrial Engineering. Guangzhou, China. August 10-12, 2023 (presented by co-author Minxia Chen)
  - **Winner of Outstanding paper award**
- The 15th International Annual Conference of the Chinese Scholars Association for Management Science and Engineering. Shenzhen, China. July 29-30, 2023 (presented by co-author Minxia Chen)
- 2023 POMS International Conference in China. Hangzhou, China. July 1-2, 2023 (presented by co-author Minxia Chen)
- (withdraw due to Visa issue) 2023 INFORMS MSOM Conference. Montreal, Canada. June 24-26, 2023

**Online Inventory Control with Censored Demand: A Neural Network-Based Approach**

- 2023 POMS International Conference in China. Hangzhou, China. July 1-2, 2023 (presented by co-author Nachuan Shi)

**PACIS 2023 Junior Faculty Consortium** Nanchang, China. July 9, 2023

**JANOS: Integrated Predictive and Prescriptive Modeling Framework**

- SSOM (online), Guangzhou, China, December 18 - 19, 2021
- POMS Annual Conference 2020 (canceled). Minneapolis, MN, U.S.A. April 23 - 27, 2020
- INFORMS Optimization Society Conference 2020 (canceled). Greenville, SC. March 15 - 17, 2020 (presented by co-author Dr. David Bergman)
- Winter Conference on Business Analytics (WCBA) 2020 (canceled). Snowbird, UT. March 12 - 14, 2020 (accepted for a poster presentation) [canceled]

- **NYC Operations Day 2020** (accepted for a poster presentation) [canceled]
- The 29th Workshop on Information Technologies and Systems (WITS 2019). Munich, Germany. December 18-20, 2019. (Demo/Prototype)
- INFORMS Annual Meeting 2019. Seattle, WA. October 20-23, 2019

### **Social Media Sentiment and COVID-19 Transmission: Results from a Time-varying SIR Model**

- Pacific Asia Conference on Information Systems. July 12 - 14, 2021 - Online (presented by co-author Yue Xu)

### **A Preliminary Investigation of COVID-19 Transmission in the United States by Incorporating Social Media Sentiments**

- The 2020 ASIS&T Virtual Annual Meeting. October 25 - 29, 2020 (poster presented by co-author Tianyi Tan)

**POMS Doctoral Consortium** (canceled) Minneapolis, MN. April 25, 2020

### **Template-based Minor Embedding in Chimera Graphs for Adiabatic Quantum Optimization**

- Mixed Integer Programming Workshop 2020. Rutgers University (withdraw from the online workshop). May 18 - 21, 2020 (accepted for a poster presentation) [withdraw from the online meeting]
- INFORMS Optimization Society Conference 2020 (canceled). Greenville, SC. March 15 - 17, 2020 (presented by co-author Dr. Thiago Serra)

### **Discrete Optimization with Objective Functions Learned Through Predictive Modeling**

- The 29th Workshop on Information Technologies and Systems (WITS 2019). Munich, Germany. December 18-20, 2019. (Dissertation Proposal)

### **Data-Driven Optimization for Team Formation**

- INFORMS Optimization Society Conference 2020 (canceled). Greenville, SC. March 15 - 17, 2020 (presented by co-author Dr. David Bergman)
- Winter Conference on Business Analytics (WCBA) 2020. Snowbird, UT. March 12 - 14, 2020 (accepted for a poster presentation) [canceled]
- INFORMS Annual Meeting 2019. Seattle, WA. October 20-23, 2019
- The 3rd INFORMS Workshop on Data Science (DS 2019). Seattle, WA. October 19, 2019 (accepted for a poster presentation)
- INFORMS Computing Society Conference (ICS) 2019. Knoxville, Tennessee. January 2019 (presented under title “*Predicting and Optimizing Team Formation*”)

**POMS Doctoral Consortium** Washington D.C. May 4, 2019

### **Predictive and Prescriptive Analytics for Location Selection of Add-on Retail Products**

- INFORMS Annual Meeting 2019. Seattle, WA. October 20-23, 2019
- The 14th INFORMS Workshop on Data Mining and Decision Analytics (DMDA 2019). Seattle, WA. October 19, 2019
- POMS Annual Meeting 2019. Washington D.C. May 2019
- Winter Conference on Business Analytics (WCBA) 2019. Snowbird, UT. March 2019 (accepted in a regular session)

- INFORMS Annual Meeting 2018. Phoenix, AZ. November 2018

AWARDS AND  
SCHOLARSHIPS

School of Business — Sun Yat-sen University

- Outstanding instructor for the first SYSU-HBP Global Digital Business Administration Simulation and Case Analysis Competition published by SYSU School of Business and Harvard Business School in 2024 March 7, 2025
- Outstanding Instructor of the Fourth Undergraduate Paper Competition of the School of Business, Sun Yat-sen University December 2023
- Fang K.X. (2024). A bibliometric analysis of telemedicine in economics and management
  - Third Prize in the “4th Undergraduate Paper Competition” of the School of Management of Sun Yat-sen University

Student Awards — University of Connecticut

- Teaching Assistant Award (Department of Operations and Information Management) Spring 2020
- The Graduate Student Intern of the Year 2019 (third place) Spring 2020
- Doctoral Dissertation Fellowship (The Graduate School) Spring 2020
- Peter Shanley Endowment (School of Business) Fall 2018 – Spring 2019

Student Awards — Sun Yat-sen University

- Scholarship for Graduate students Fall 2012 – Spring 2013
- Scholarship of 3M for students in Library Science December 2012
- The 3rd prize, Distinguished Student Scholarship Fall 2008 – Spring 2009
- The 3rd prize, Distinguished Student Scholarship Fall 2007 – Spring 2008

National Olympiad in Informatics (NOI), China

- The 3rd prize (national) & the 2nd prize (regional) 2005 & 2006

WORK  
EXPERIENCE

**Mitsubishi Electric Research Laboratories** (MERL), Cambridge, MA

Intern January 2019 - April 2019

**IT Department, Giordano International Limited**, Guangzhou, China

Data Analyst & Programmer May 2013 - November 2014

**Yunnex.com**, Guangzhou, China

Assistant of Media Manager September 2014 - November 2014

**Valleytalk.org**, CA, USA

Blogger June 2014 - August 2014

**Siemens Transformer (Guangzhou) Co., Ltd.** (STGZ), Guangzhou, China

Intern November 2012 - January 2013

MENTORSHIP **Undergraduate Students**

- Chuling Yu, Management Science, Lingnan College, Sun Yat-sen University, 2023 (**University-level Outstanding Undergraduate Thesis**)
- Fan Chen, Management Science, Lingnan College, Sun Yat-sen University, 2022
- Changhui Zhong, Management Science, Lingnan College, Sun Yat-sen University, 2022 (**College-level Outstanding Undergraduate Thesis**)

SOCIAL SERVICE **Crew Member**

Route Marking: Advanced (Team B);

2019 Out of the Darkness – Overnight Walk by the American Foundation of Suicide Prevention, Boston, MA, United States June 22, 2019

**Volunteer**

“With the Party’s care warming the sunset years, companionship brings heartfelt conversations” — Volunteer Service Activity at the Nursing Home (“党心暖夕阳，陪伴话家常” 养老院陪伴志愿服务活动) August 10, 2025

2020 Out of the Darkness – Overnight Walk by the American Foundation of Suicide Prevention, New York City, United States [**donate**] June 20, 2020

UConn New Graduate Students Orientation – Tour Guide August 20, 2019

**INFORMS Pro Bono Analytics (PBA)** May 2019 – present

UConn New International Graduate Students Orientation – Tour Guide August 2016

UConn Clean Sweep sponsored by Residential Life (Shift assignment at Northwood Apartments) November 15, 2015

Tutor elementary and middle school students whose parents are migrants in Guangzhou, China April 2013 – January 2014

Take and print family photos of residents in a rural village in Yunnan, China January 2014

Reference Services in Guangzhou City Library, Guangzhou, China January 2013 – February 2013

**Assistant**

Administration Office of School of Information Management, Sun Yat-sen University, Guangzhou, China February 2011 & February 2012