

# Zhenyu Hu

---

<b>Contact Information</b>	NUS Business School BIZ1 8-62, 15 Kent Ridge Drive Singapore 119245	Phone: (+65) 6516-3167 E-mail: bizhuz@nus.edu.sg Website: <a href="https://sites.google.com/site/huzhenyusysu/">https://sites.google.com/site/huzhenyusysu/</a>
<b>Research Interests</b>	Dynamic Pricing and Revenue Management Inventory and Supply Chain Management Dynamic Programming and Optimal Control Game Theory	
<b>Academic Positions</b>	<b>National University of Singapore, NUS Business School</b> Associate Professor Assistant Professor	Singapore Jul. 2021 - present Jul. 2015 - Jun. 2021
<b>Education</b>	<b>University of Illinois at Urbana-Champaign</b> Ph.D. in Industrial Engineering Thesis: <i>Dynamic Pricing with Reference Price Effects</i> Advisor: Prof. Xin Chen	Urbana, IL Aug. 2011 - Jul. 2015
	<b>Sun Yat-sen University</b> Bachelor of Science in Mathematics, Minor in Finance Thesis: <i>Controlled Markov Jump Processes on a Generalized History</i> Advisor: Prof. Xianping Guo	Guangzhou, China Sept. 2007 - Jun. 2011
<b>Corporate Experience</b>	<b>IBM T. J. Watson Research Center</b> Research Summer Intern	Yorktown Heights, NY May 2014 - Aug. 2014
	<b>Galaxy Asset Management Co., Ltd.</b> Summer Intern in Equity Investment Division	Shanghai, China Jul. 2010 - Aug. 2010
<b>Teaching Experience</b>	Lecturer, National University of Singapore <ul style="list-style-type: none"><li>• DBA5103: Operations Research and Analytics</li><li>• DSC3214: Introduction to Optimization</li><li>• BDC6111: Foundations of Optimization</li><li>• BDC6113: Foundations of Inventory Management</li><li>• BDC6114A: DS Proseminar (Cooperative Game Theory)</li><li>• BDC5101: Deterministic Operations Research</li></ul>	2020 - 2021 2019, 2021 2018 2017 - 2018 2016 2015 - 2019
<b>Publications</b>	<b>Zhenyu Hu</b> and Wenjie Tang. 2021. Size Matters, So Does Duration: The Interplay between Offer Size and Offer Deadline. Accepted by <i>Management Science</i> .  Zhi Chen, <b>Zhenyu Hu</b> and Qinshen Tang. 2020. Allocation Inequality in Cost Sharing Problem. <i>Journal of Mathematical Economics</i> , 91, 111-120.  Zhaowei Hao, Long He, <b>Zhenyu Hu</b> and Jun Jiang. 2020. Robust Vehicle Pre-Allocation with Uncertain Covariates. <i>Production and Operations Management</i> , 29(4), 955-972.  Chaolin Yang, <b>Zhenyu Hu</b> and Sean Zhou. 2020. Multilocation Newsvendor Problem: Centralization and Inventory Pooling. Accepted by <i>Management Science</i> .  Long He, <b>Zhenyu Hu</b> and Meilin Zhang. 2020. Robust Repositioning for Vehicle Sharing. <i>Manufacturing &amp; Service Operations Management</i> , 22(2), 223-428.  Xin Chen, Xiangyu Gao, <b>Zhenyu Hu</b> and Qiong Wang. 2019. Population Monotonicity in Newsvendor Games. <i>Management Science</i> , 65(5), 2142-2160.	

Xin Chen, **Zhenyu Hu** and Yuhan Zhang. 2019. Dynamic Pricing with Stochastic Reference Price Effect. *Journal of the Operations Research Society of China*, 7(1), 107-125. *Special issue in honor of Professor Yinyu Ye's 70th birthday.*

**Zhenyu Hu** and Javad Nasiry. 2018. Are Markets with Loss-Averse Consumers More Sensitive to Losses? *Management Science*, 64(3), 1384-1395.

Xin Chen, Peng Hu and **Zhenyu Hu**. 2017. Efficient Algorithms for Dynamic Pricing Problem with Reference Price Effects. *Management Science*, 63(12), 4389-4408.

**Zhenyu Hu**, Xin Chen and Peng Hu. 2016. Dynamic Pricing with Gain-Seeking Reference Price Effects. *Operations Research*, 64(1), 150-157.

Xin Chen, Xiangyu Gao and **Zhenyu Hu**. 2015. A New Approach to Two-Location Joint Inventory and Transshipment Control via  $L^h$ -Convexity. *Operations Research Letters*, 43(1), 65-68.

**Working Papers** Xin Chen, **Zhenyu Hu** and Shuanglong Wang. Stable Risk Sharing and Its Monotonicity.

**Zhenyu Hu** and Yangge Xiao. Optimal Dynamic Mechanism under Customer Search.

Zhi Chen, **Zhenyu Hu** and Ruiqin Wang. Screening with Limited Information: The Minimax Theorem and A Geometric Approach.

**Patent** Cargo Logistics Dispatch Service with Integrated Pricing and Scheduling. with Pawan R. Chowdhary, Markus R. Ettl, Roger D. Lederman, and Zhengliang Xue. US 10,692,039 B2.

**Student Supervision** Ph.D. Students

- Zhi Chen, committee member. Graduated 2017. First position: Department of Management Science, City University of Hong Kong
- Jun Jiang, committee member. Expected to graduate in 2022.
- Yangge Xiao, main advisor. Expected to graduate in 2023.
- Ruiqin Wang, co-advisor with Melvyn Sim. Expected to graduate in 2023.
- Wenjie Sun, co-advisor with Lucy Chen. Expected to graduate in 2024.

Master Student

- Yuntao Huang, main advisor. Graduated 2020.

**Post Doctoral Supervision** Zhaowei Hao. Jul. 2017 - Dec. 2019. First position: Institute of Supply Chain Analytics, Dongbei University of Finance and Economics

**Conferences Presentations**

*Robust Vehicle Allocation with Uncertain Covariates*

- INFORMS Annual Meeting, Online Nov. 2020
- INFORMS Annual Meeting, Seattle, WA Oct. 2019

*Multilocation Newsvendor Problem: Centralization and Inventory Pooling*

- The 11th POMS-HK International Conference, Hong Kong, China Jan. 2020
- POMS 30th Annual Conference, Washington D.C. May 2019

*Size Matters, So Does Duration: The Interplay between Offer Size and Offer Deadline*

- CSAMSE 12th Annual Conference, Chengdu, China Jul. 2019
- INFORMS Applied Probability Society Conference, Brisbane, Australia Jul. 2019
- INFORMS Annual Meeting, Phoenix, AZ Nov. 2018

*Robust Repositioning for Vehicle Sharing*

- INFORMS Annual Meeting, Seattle, WA Oct. 2019
- The Ninth POMS-HK International Conference, Hong Kong, China Jan. 2018

*Are Markets with Loss-Averse Consumers More Sensitive to Losses?*

- INFORMS Annual Meeting, Seattle, WA Oct. 2019
- MSOM Conference, Singapore Jul. 2019
- INFORMS Annual Meeting, Houston, TX Oct. 2017

*Stable Risk Sharing and Its Monotonicity*

- 23rd ISMP, Bordeaux, France Jul. 2018
- POMS 28th Annual Conference, Seattle, WA May 2017

*Population Monotonicity in Newsvendor Games*

- INFORMS Applied Probability Society Conference, Chicago, IL Jul. 2017
- The Eighth POMS-HK International Conference, Hong Kong, China Jan. 2017
- 22nd ISMP, Pittsburgh, PA Jul. 2015

*Dynamic Pricing with Stochastic Reference Price Effects*

- INFORMS Annual Meeting, Nashville, TN Nov. 2016

*Efficient Algorithms for Dynamic Pricing Problem with Reference Price Effect*

- CSAMSE 9th Annual Conference, Hefei, China Jul. 2016
- INFORMS Revenue Management and Pricing, New York City, NY Jun. 2016
- POMS 27th Annual Conference, Orlando, FL May 2016

*A New Approach to Two-Location Joint Inventory and Transshipment Control via L-Natural-Convexity*

- The Seventh POMS-HK International Conference, Macau, China Jan. 2016
- POMS 26th Annual Conference, Washington D.C. May 2015

*Dynamic Pricing with Gain-Seeking Reference Price Effects*

- The Sixth POMS-HK International Conference, Guangzhou, China, Jan. 2015
- INFORMS Annual Meeting, San Francisco, CA Nov. 2014

**Invited Talks**

- Shanghai University of Finance and Economics, online via Zoom Jul. 2021
- Zhejiang University, online via Zoom Jul. 2020
- Zhejiang University, Hangzhou, China Jan. 2020
- Sun Yat-sen University, Guangzhou, China Dec. 2019
- Huazhong University of Science and Technology, Wuhan, China Jun. 2019
- Nanjing University, Nanjing, China Jun. 2019
- Singapore University of Technology and Design, Singapore Sep. 2018
- National University of Singapore, Singapore Sep. 2018
- Sun Yat-sen University, Guangzhou, China Jun. 2018
- National University of Singapore, Singapore Mar. 2018
- South China University of Technology, Guangzhou, China Sep. 2017
- Singapore Management University, Singapore Mar. 2017
- Hunan University, Changsha, China Jan. 2017
- Hong Kong Polytechnic University, Hong Kong, China Nov. 2016
- South China University of Technology, Guangzhou, China Jan. 2016
- Sun Yat-sen University, Guangzhou, China Jan. 2016
- Wuhan University, Wuhan, China Dec. 2015
- Nanyang Technological University, Singapore Oct. 2015
- National University of Singapore, Singapore Jan. 2015
- The Chinese University of Hong Kong, Hong Kong, China Jan. 2015

**Professional Services**

- Ad Hoc Reviewer for Journals
  - *Management Science*
  - *Operations Research*
  - *Mathematics of Operations Research*
  - *Manufacturing & Service Operations Management*
  - *Production and Operations Management*

- *Naval Research Logistics*
- *INFORMS Journal on Optimization*
- *IEEE Transactions on Automatic Control*
- *IIEE Transactions*
- *Decision Sciences*
- *Service Science*
- *Operations Research Letters*
- *Omega*
- *Transportation Research Record*
- *Transportation Research Part E: Logistics and Transportation Review*
- *Journal of Mathematical Economics*
- *Journal of Industrial and Management Optimization*
- *Journal of the Operational Research Society*
- *Journal of the Operations Research Society of China*

Program/Organizing Committee for Conferences

- The 22nd Conference of IFORS, Seoul, Korea
- The Eleventh POMS-HK International Conference, Hong Kong, China
- MSOM Conference 2019, Singapore
- The Tenth POMS-HK International Conference, Hong Kong, China
- The Ninth POMS-HK International Conference, Hong Kong, China

Invited Area Chair for Conferences

- “Revenue Management and Pricing” Area of The 22nd Conference of IFORS, Seoul, Korea

Invited Session Chair for Conferences

- POMS 30th Annual Conference, Washington D.C.
- The Ninth POMS-HK International Conference, Hong Kong, China
- POMS 28th Annual Conference, Seattle, WA
- CSAMSE 9th Annual Conference, Hefei, China
- The Sixth POMS-HK International Conference, Guangzhou, China

Membership

- Member, INFORMS
- Member, POMS

**Computer Skills** C/C++, MATLAB, Python, R, AMPL, L<sup>A</sup>T<sub>E</sub>X

**Languages** English, Japanese, Mandarin

**Honors and Awards**

<b>Management Science Distinguished Service Award</b> , INFORMS	2021
<b>William A. Chittenden Award</b> , University of Illinois at Urbana-Champaign	2015
<b>List of Teachers Ranked Excellent</b> , University of Illinois at Urbana-Champaign	2014 - 2015
<b>Dobrovolny Scholarship</b> , University of Illinois at Urbana-Champaign	2014
<b>National Scholarship of China</b> , Sun Yat-sen University	2008 - 2009