## **CURRICULUM VITAE**

# **Xiting Gong**

Room 906, 9/F, Cheng Yu Tung Building, 12 Chak Cheung Street, Shatin, N.T., Hong Kong Email: xtgong@cuhk.edu.hk

Phone: +852 3943-7650
Webpage: https://www.bschool.cuhk.edu.hk/staff/gong-xiting/

# **APPOINTMENTS**

- The Chinese University of Hong Kong
  - Department of Decision Sciences and Managerial Economics, CUHK Business School
    - Associate Professor (07/2019 present)
    - Assistant Professor (08/2017 07/2019)
  - Department of Systems Engineering and Engineering Management, Faculty of Engineering
    - Associate Professor (by courtesy) (08/2019 present)
    - Assistant Professor (07/2013 07/2019)
  - Chung Chi College (08/2014 present)
- The University of Michigan, Ann Arbor
  - Department of Industrial and Operations Engineering, College of Engineering
    - Postdoctoral Research Fellow (08/2010 05/2013)

## **EDUCATION**

- Ph.D. in Management Science, Guanghua School of Management, Peking University, 2010
- M.A. in Management Science, Guanghua School of Management, Peking University, 2006
- **B.S.** in Applied Mathematics, School of Mathematical Sciences, Peking University, 2004

## **RESEARCH INTERESTS**

- Operations management
- Stochastic inventory theory and applications
- Revenue management and pricing
- Approximation and data-driven algorithms

### **JOURNAL PUBLICATION** (\* denotes a student I worked with)

- 1. J. Bu\*, X. Gong, X. Chao. 2022. Asymptotic optimality of base-stock policies for perishable inventory systems. *Management Science*, Articles in Advance: 1-19.
- 2. X. Gong, Y. F. Chen, Q. Yuan. 2022. Coordinating inventory and pricing decisions under total minimum commitment contracts. *Production and Operations Management*, 31(2): 511-528.
  - Best Paper Award (3<sup>rd</sup> Prize) in 2021 Institute of Supply Chain and Operations Management Annual Meeting (ISCOM 2021), November 2021
- 3. X. Gong, T. Wang\*. 2021. Preservation of additive convexity and its applications in stochastic optimization problems. *Operations Research*, 69(4): 1015-1024.

- 4. K. Fu, X. Gong, V. N. Hsu, J. Xue. 2021. Dynamic inventory management with inventory-based financing. *Production and Operations Management*, 30(5): 1313-1330.
- 5. T. Chen\*, X. Gong, Q. Li, H. Xu. 2021. Multiseason production planning under export quotas. *Naval Research Logistics*, 68(3): 279-294.
- 6. J. Bu\*, X. Gong, D. Yao. 2020. Constant-order policies for lost-sales inventory models with random supply functions: Asymptotics and heuristic. *Operations Research*, 68(4): 1063-1073.
  - Honorable Mention in POMS-HK Best Student Paper Competition, January 2018
- 7. K. Fu, X. Gong, G. Liang\*. 2019. Managing perishable inventory systems with product returns and remanufacturing. *Production and Operations Management*, 28(6): 1366-1386.
- 8. X. Chao, X. Gong, C. Shi, C. Yang\*, H. Zhang\*, S. X. Zhou. 2018. Approximation algorithms for capacitated perishable inventory systems with positive lead times. *Management Science*, 64(11): 5038-5061.
- 9. T. Wang\*, X. Gong, S. X. Zhou. 2017. Dynamic inventory management with total minimum order commitments and two supply options. *Operations Research*, 65(5): 1285-1302.
  - Honorable Mention in POMS-HK Best Student Paper Competition, January 2016
- 10. X. Chao, X. Gong, S. Zheng. 2016. Optimal pricing and inventory policies with reliable and random-yield suppliers: Characterization and comparison. *Annals of Operations Research*, 241(1-2): 35-51.
- 11. X. Chao, X. Gong, C. Shi, H. Zhang\*. 2015. Approximation algorithms for perishable inventory systems. *Operations Research*, 63(3): 585-601.
- 12. X. Gong, X. Chao, S. Zheng. 2014. Dynamic pricing and inventory management with dual suppliers of different lead times and disruption risks. *Production and Operations Management*, 23(12): 2058-2074.
- 13. W. Zhou, X. Chao, X. Gong. 2014. Optimal uniform pricing strategy of a service firm when facing two classes of customers. *Production and Operations Management*, 23(4): 676-688.
- 14. X. Gong, X. Chao, D. Simchi-Levi. 2014. Dynamic inventory control with limited capital and short-term financing. *Naval Research Logistics*, 61(3): 184-201.
- 15. X. Gong, S. X. Zhou. 2013. Optimal production planning with emissions trading. *Operations Research*, 61(4): 908-924.
- 16. X. Gong, X. Chao. 2013. Optimal control policy for capacitated inventory systems with remanufacturing. *Operations Research*, 61(3): 603-611.
- 17. G. Cai, Y. Chen, X. Gong. 2012. Design of online auctions: proxy versus non-proxy settings. *Decision Support Systems*, 52(2): 384-394.
- 18. Q. Wang, X. Gong, H. Deng, G. K. Leong. 2011. The use of switching point and protection levels to improve revenue performance in order-driven production systems. *Decision Sciences*, 42(2): 495-509.

### **BOOK CHAPTERS**

1. X. Gong, S. X. Zhou. 2021. Inventory models with returns and remanufacturing. Forthcoming in *Research Handbook on Inventory Management*, edited by J.-S. Song, Edward Elgar Publishing.

## **WORKING PAPERS**

1. X. Gong, S. Liu\*. 2021. Managing hybrid manufacturing/remanufacturing inventory systems with random production capacities. Under revision.

2. T. Chen\*, X. Gong. 2017. Optimal control policy for stochastic inventory models with two substitutable products. Under revision.

## **TEACHING EXPERIENCE**

- CUHK Business School
  - DSME6632: Research Seminar in Operations & SCM (PhD), Spring 2023
  - DSME6730: Project Management (MScITM Required), Spring 2022, 2023
  - DSME4020: Decision Modeling and Analytics (UG BA Concentration Required), Fall 2019, Fall 2020, Spring 2021
  - DSME6620: Decision Models and Applications (MScBA Required), Winter 2017, Fall 2018, Winter 2019, Fall 2020, Fall 2021, Fall 2022
- Faculty of Engineering
  - SEEM3500: Quality Control and Management (UG Elective), Spring 2017, 2018, 2019
  - SEEM5630: Stochastic Inventory and Revenue Management (PhD Elective), Spring 2016
  - ENGG1410: Linear Algebra and Vector Calculus for Engineers (UG Faculty Foundation), Spring 2014, 2015, 2016, 2017, 2018
  - SEEM4480: Decision Methodology and Applications (UG Elective), Fall 2013, 2014, 2015

## **RESEARCH GRANTS**

## Competitive RGC Grants

- General Research Fund: "Provably Near-optimal Approximation Algorithms for Lost-sales Remanufacturing Inventory Systems with Positive Lead Times", 01/2023 12/2024, HK\$482,381, PI.
- General Research Fund: "Asymptotically Optimal Policies for a Perishable Inventory System with Positive Lead Times", 01/2021 12/2022, HK\$467,440, PI.
- General Research Fund: "Managing Hybrid Manufacturing/remanufacturing Inventory Systems with Different Lead Times", 01/2019 06/2022, HK\$632,421, PI, with X. Chao (Co-I).
- General Research Fund: "Coordinating Inventory and Pricing Strategies under Total Minimum Commitment Contracts", 12/2015 05/2019, HK\$695,854, PI, with Y. F. Chen (Co-I).
- Early Career Scheme: "Developing Provably Near-optimal Approximation Algorithms for Perishable Inventory Systems", 07/2014 12/2017, HK\$506,737, PI.
  - Including an ECS Grant (for educational activities): HK\$50,000.
- General Research Fund: Elective Surgery Planning and Scheduling with Inter-hospital Cooperation", 10/2013 03/2017, HK\$836,450, PI, with X. Cai (Co-I).

# Industrial Grant

- Huawei Technologies Company Limited: "Supply Chain Inventory Control Engine", 09/2017 – 09/2018, HK\$793,000, PI.

### **CUHK Direct Allocation Grants**

- "Managing Hybrid Manufacturing/remanufacturing Inventory Systems with Random Capacities", 01/2021 12/2022, HK\$90,000, PI.
- "Asymptotic Optimality and Heuristic of Base-stock Policies for Perishable Inventory Systems", 11/2018 10/2020, HK\$15,000, PI.
- "Constant-order Policies for Lost-sales Inventory Models with Random Supply Functions",

- 01/2018 12/2018, HK\$25,000, PI.
- "Dynamic Inventory Models with Limited Capital and Financing Capability: Optimal Policy and Heuristic Algorithms", 11/2013 10/2016, HK\$150,000, PI.

### **CONFERENCE PRESENTATIONS AND SEMINARS**

- "Managing hybrid manufacturing/remanufacturing inventory systems with random production capacities"
  - School of Management and Engineering, Nanjing University, Nanjing, December 15, 2021
- "Provably near-optimal heuristic replenishment policies for perishable inventory systems"
  - Workshop on the 4th "Internet-plus LSCM&O" and the 3rd "Internet-plus M&SOM", November 29-30, 2020
- "Asymptotic optimality of base-stock policies for perishable inventory systems"
  - POMS 32<sup>nd</sup> Annual Conference (Online), invited one-hour tutorial, April 21-25, 2022
  - School of Economics and Management, Tsinghua University, Beijing, June 20, 2019
  - Guanghua School of Management, Peking University, Beijing, June 18, 2019
  - "Data-driven Management Decisions" Summer School, Hunan University, Changsha, June 4, 2019
  - Mostly OM Workshop, CUHK (Shenzhen), Shenzhen, May 31-June 2, 2019
  - Operations Management Day, The Chinese University of Hong Kong, April 12, 2019
- "Optimal control policy for stochastic inventory models with two substitutable products"
  - POMS 29th Annual Conference, Houston, TX, May 4-7, 2018
- "Constant-order policies for lost-sales inventory models with random supply functions: Asymptotics and heuristic"
  - INFORMS International Meeting, Taipei, Taiwan, June 17-20, 2018
  - Young Scholars' Workshop on Management Science, Hainan University, Haikou, Dec. 28-30, 2017
- "Preservation of additive convexity and its applications in stochastic optimization problems"
  - INFORMS International Meeting, Taipei, Taiwan, June 17-20, 2018
  - POMS 29th Annual Conference, Houston, TX, May 4-7, 2018
  - Academy of Mathematics and Systems Science, Chinese Academy of Sciences, Beijing, July 5, 2017
  - POMS 28th Annual Conference, Seattle, WA, May 5-8, 2017
  - Young Scholars' Forum, Nanjing University Business School, Nanjing, April 14, 2017
  - Sch. of Math. and Statistics, Huazhong University of Science and Technology, Wuhan, April 7, 2017
  - Dept. of Decision Sciences, National University of Singapore, Singapore, November 23, 2016
- "Approximation algorithms for capacitated perishable inventory systems with positive lead times"
  - Faculty Inter-departmental Research Workshop, CUHK Business School, April 26, 2019
  - INFORMS Annual Meeting, Nashville, TN, November 13-16, 2016
  - MSOM Supply Chain Management SIG Conference, Auckland, New Zealand, June 29, 2016
  - The 7th POMS-HK International Conference, Macau, January 9-10, 2016
  - NCTU-CUHK Joint Research Forum on Logistics and Supply Chain Management, Hsinchu, Taiwan, December 21-24, 2015
  - Dept. of Logistics and Maritime Studies, Hong Kong Polytechnic University, Hong Kong, November 17, 2015
- "Dynamic inventory management with total minimum order commitments and two supply options"
  - Guanghua School of Management, Peking University, Beijing, July 6, 2017

- 1st Young Scholars' Forum, Nanjing University, Nanjing, May 27-29, 2017
- Workshop on Logistics and Supply Chain Management, Hong Kong, August 20-21, 2015
- POMS 26th Annual Conference, Washington D.C., May 8-11, 2015
- INFORMS Annual Meeting, San Francisco, CA, November 9-12, 2014
- "Approximation algorithms for perishable inventory systems"
  - Young Scholars' Forum on Optimization and Management Science, Changsha University of Science and Technology, Changsha, December 19-20, 2015
  - POMS International Conference 2014, Singapore, July 21-23, 2014
  - Dept. of Operations Management, Shanghai Jiao Tong University, Shanghai, May 28, 2014
  - Dept. of Systems Engineering, Northeastern University, Shenyang, May 20, 2014
  - Dept. of Logistics Engineering and Management, Sun Yat-sen University, Guangzhou, May 9, 2014
  - Dept. of Industrial Engineering, South China University of Technology, Guangzhou, May 8, 2014
  - Dept. of ISOM, Hong Kong University of Science and Technology, Hong Kong, March 28, 2014
  - Dept. of Management Sciences, City University of Hong Kong, Hong Kong, March 21, 2014
  - CUHK-NCTU Joint Research Forum on Logistics and Supply Chain Management, Hong Kong, February 14, 2014
  - The 5th POMS-HK International Conference, Hong Kong, January 3-4, 2014
  - INFORMS Annual Meeting, Minneapolis, MN, October 6-9, 2013
- "Dynamic pricing and inventory management with dual suppliers of different lead times and disruption risks"
  - Dept. of Systems Engineering and Engineering Management, The Chinese University of Hong Kong, Hong Kong, February 1, 2013
  - INFORMS Annual Meeting, Phoenix, AZ, October 14-17, 2012
- "Dynamic inventory control with limited capital and short-term financing"
  - INFORMS Annual Meeting, Phoenix, AZ, October 14-17, 2012
- "Optimal control policy for capacitated inventory systems with remanufacturing"
  - INFORMS Annual Meeting, Charlotte, NC, November 13-16, 2011
- "Rebates in a competitive multichannel market"
  - INFORMS Annual Meeting, San Diego, CA, October 11-14, 2009
- "Obtaining fast service through stable allocation policies"
  - International Symposium on Supply Chain Management, Sanya, December 28-30, 2008

## **STUDENT SUPERVISION**

### PhD Students

- Huanyu Yin (PhD candidate, DSE), 08/2020 present
- Suting Liu (PhD candidate, DSE), 08/2018 present
- Jinzhi Bu (PhD, SEEM), 08/2015 07/2019
  - <u>Thesis</u>: "Asymptotic Optimality of Simple Heuristic Policies for Perishable and Lost-sales Inventory Systems"
  - Placement: Postdoctoral associate, Massachusetts Institute of Technology, Cambridge, MA
  - <u>Current position</u>: Assistant professor, Department of Logistics and Maritime Studies, Faculty of Business, The Hong Kong Polytechnic University, Hong Kong
  - Award: Honorable Mention in POMS-HK Best Student Paper Competition, 01/2018
- Tianxiao Chen (PhD, SEEM), 08/2014 07/2018

- Thesis: "Optimal Control Policies for Lost-sales Inventory Systems"
- Placement: Researcher, Noah's Ark Lab, Huawei Technologies Co., Ltd., Shenzhen
- Tong Wang (PhD, SEEM), 08/2012 07/2017 (co-supervisor: Sean X. Zhou)
  - Thesis: "Production and Inventory Management under Different Supply Options"
  - <u>Placement</u>: Assistant professor (current position: Associate professor), Antai College of Economics and Management, Shanghai Jiao Tong University, Shanghai
  - Award: Honorable Mention in POMS-HK Best Student Paper Competition, 01/2016

# MPhil Student

- Ning Ma (MPhil, SEEM), 08/2017 07/2019
  - <u>Thesis</u>: "Dynamic Inventory and Pricing Management with Total Minimum Commitment Contracts and Positive Lead Times"
  - Placement: PhD student, W. P. Carey School of Business, Arizona State University

# **RESEARCH ASSISTANTS**

- Jiarui Gary Wei (Junior RA, 08/2020 06/2021)
  - Placement: PhD student, Naveen Jindal School of Management, University of Texas at Dallas
- Ning Ma (RA, 08/2019 05/2020)
  - Placement: PhD student, W. P. Carey School of Business, Arizona State University

## **HONORS AND AWARDS**

- Faculty Teaching Merit Award, CUHK Business School, 2019-20, 2020-21
- Excellent Graduate Award, Peking University, 2010
- "Leo KoGuan" Scholarship, Peking University, 2009
- "May Fourth" Scholarship, Peking University, 2008
- "Ling Rui" Scholarship, Peking University, 2005, 2007
- Honorable Mention in National Business Simulation Contest, 2005, 2006
- First Prize in National Mathematics Contest of China, 1999

### UNIVERSITY SERVICES

- University Committees
  - Member, Committee on Library Users Group, 08/2021 present
- College Committees (Chung Chi College)
  - Member, Yu-Luan & Academic Creativity Awards Sub-Committee, 08/2019 present
  - Member, Student Visitor Programme Committee, 08/2015 07/2019
  - Department Coordinator (SEEM), 05/2015 07/2019
- Faculty Committees
  - Member, Committee on Research Postgraduate Programmes, 08/2019 present
  - Member, Task Force of New UG Programme on Business Data Analytics, 08/2019 07/2021
  - Member, Board of Faculty of Engineering, 08/2017 07/2019
- Department Committees (DSE)
  - Chairman, Graduate Panel, 08/2019 present
  - Member, Department Executive Committee, 08/2021 present
  - Member, MScBA Programme Committee, 08/2017 07/2018, 08/2019 present
  - Academic Advisor, IBBA Business Analytics Concentration, 08/2019 07/2021

- Member, Curriculum Committee, 08/2018 07/2019
- Department Committees (SEEM)
  - Member, PhD Candidacy Examination Committee, 08/2017 07/2018
  - Member, Examination Panel, 08/2016 07/2019
  - Member, Final Year Project Coordination Committee, 08/2016 07/2019
  - Member, TA Affairs Committee, 08/2013 07/2019
  - Member, Teaching and Learning Committee, 08/2013 07/2019

## PROFESSIONAL SERVICES

- Editorial Service
  - Associate Editor, *Operations Research Letters*, 04/2021 present
  - Associate Editor, Naval Research Logistics, 08/2018 present
- Referee for Journals
  - Management Science, Manufacturing & Service Operations Management, Operations Research, Production and Operations Management
  - Asia-Pacific Journal of Operational Research, Decision Sciences, IIE Transactions, International Journal of Production Economics, Journal of Industrial and Management Optimization, Journal of the Operations Research Society of China, Mathematics of Operations Research, Naval Research Logistics, Omega, Operations Research Letters
- Conference Organization
  - Co-chair of "OM and Marketing Interface" Track for POMS China Conference, 2019
  - Co-chair of "Inventory Management" Track for POMS Annual Conference, 2019
  - Co-chair of Program Committee for POMS-HK International Conference, 2018
  - Member of Organizing Committee for POMS-HK International Conference, 2016, 2017
  - Member of Program Committee for POMS-HK International Conference, 2019, 2020
  - Session Chair for Annual International Conference of CSAMSE, 2017, 2018
  - Session Chair for INFORMS Annual Meeting, 2013, 2016, 2017, 2020
  - Session Chair for Mostly OM Workshop, 2018, 2019
  - Session Chair for POMS Annual Conference, 2015, 2021
  - Session Chair for POMS-HK International Conference, 2014, 2016, 2017, 2019
- Referee for National Science Fund for Distinguished Young Scholars, National Natural Science Foundation of China, 2022
- Referee for Excellent Young Scientists Fund, National Natural Science Foundation of China,
   2021
- External Examiner for PhD thesis in HKUST, 2021
- External Reviewer for UG courses in School of Management and Economics, CUHK (Shenzhen), 2018-19, 2019-20, 2020-21, 2021-22
- External Reviewer for MPhil thesis in CUHK (Shenzhen), 2019
- Judge for CSAMSE Best Paper Competition, 2021
- Judge for MSOM Student Paper Competition, 2017, 2018, 2019
- Judge for POMS-HK Best Student Paper Competition, 2016, 2022
- Referee for MSOM Supply Chain Management SIG Conference, 2017, 2018, 2019
- Reviewer for Hong Kong Research Grants Council, 2015
- Professional Memberships
  - Institute for Operations Research and the Management Sciences (INFORMS), 01/2010 present

- INFORMS Applied Probability Society, 01/2019 12/2020
- INFORMS Manufacturing and Service Operations Management Society, 01/2012 present
- INFORMS Revenue Management and Pricing Section, 01/2016 present
- Production and Operations Management Society, 01/2015 12/2019, 01/2021 present