

# Guodong LYU

✉ oragl@nus.edu.sg | 🌐 guodonglyu.github.io | ☎ (65) 9192 2082  
🏠 # 04-01, Innovation 4.0, 3 Research Link, Singapore, 117602

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## ACADEMIC EXPERIENCE

### National University of Singapore (NUS)

Research Fellow in the Institute of Operations Research & Analytics

Singapore

Jan. 2021

## NATIONAL SERVICE

### National University of Defense Technology (NUDT)

Lecturer in the College of Systems Engineering

Master Student in the College of Information System and Management

Changsha, China

Jul. 2019 - Dec. 2020

Sep. 2012 - Jul. 2014

## EDUCATION

### National University of Singapore (NUS)

Ph.D. in Management, NUS Business School

Advised by Professor Chung-Piaw Teo

Dissertation: "Online Resource Allocation: Theory and Applications"

Finalist in 2019 George B. Dantzig Dissertation Award Competition

Singapore

Aug. 2014 - Jun. 2019

### Beijing Normal University (BNU)

Bachelor of Science, School of Educational Technology

GPA: 92.8/100 (1st of the class)

Top-10 Outstanding Undergraduate Award, & Top-1 Popular Undergraduate Award in BNU

Best Bachelor Dissertation Award in BNU, & Outstanding Graduate Award in Beijing City

Beijing, China

Sep. 2008 - Jul. 2012

## PUBLICATION

[05] **Guodong Lyu**, Chung-Piaw Teo. 2021. Last Mile Innovation: The Case of the Locker Alliance Network. *Manufacturing & Service Operations Management* (Forthcoming).

[04] **Guodong Lyu**, Mabel C. Chou, Chung-Piaw Teo, Zhichao Zheng, Yuanguang Zhong. 2021. Stochastic Knapsack Revisited: The Service Level Perspective. *Operations Research* (Forthcoming).

[03] Libo Sun, **Guodong Lyu**, Yugang Yu, Chung-Piaw Teo. 2021. Cross-Border E-commerce Data Set: Choosing the Right Fulfillment Option. *Manufacturing & Service Operations Management*, 23(5), 1297-1313.

[02] Libo Sun, **Guodong Lyu**, Yugang Yu, Chung-Piaw Teo. 2020. Fulfillment by Amazon versus Fulfillment by Seller: An Interpretable Risk-Adjusted Fulfillment Model. *Naval Research Logistics*, 67, 627-645.

[01] **Guodong Lyu**, Wang-Chi Cheung, Mabel C. Chou, Chung-Piaw Teo, Zhichao Zheng, Yuanguang Zhong. 2019. Capacity Allocation in Flexible Production Networks: Theory and Applications. *Management Science*, 65(11), 5091-5109.

## WORKING PAPER

- Online Passenger Flow Control in Metro Lines. with Ziyao Gao, Jinpeng Liang, and Chung-Piaw Teo. Minor Revision at *Operations Research*. 2021.

- Multi-objective Stochastic Optimization: A Case of Real-time Matching in Ride-sourcing Markets. with Wang-Chi Cheung, Chung-Piaw Teo, and Hai Wang. Major Revision at *Manufacturing & Service Operations Management*. 2020.

- Fair Cash Transfer Programs: Predictive, Stochastic or Robust Allocation? with Jiannan Ke, Chung-Piaw Teo, and Huan Zheng. Major Revision at *Manufacturing & Service Operations Management*. 2021.

- Online Planning with Offline Simulation. with Wang-Chi Cheung, Chung-Piaw Teo, and Hai Wang. *Working Paper*. 2019.

- Post-Disaster Humanitarian Logistics Planning: The Impact of Correlated Uncertainties. with Sheng Bi, and Yini Gao. *Working Paper*. 2020.

- Adaptive Drug Trafficking Network Interdiction. with Chung-Piaw Teo, Kaiming Xiao, and Weiming Zhang. *Working Paper*. 2021.

- Singapore Locker Alliance System: A Pilot Study and Field Experiment. with Victor Fernandez, and Chung-Piaw Teo. *Technical Report*. 2021.

<b>WORK IN PROGRESS</b>	<ul style="list-style-type: none"> <li>• Does Locker Network Improve Last Mile Delivery Efficiency? An Analysis using Prize Collecting Traveling Salesman Model. with Long He, Chung-Piaw Teo, and Quanmeng Wang.</li> <li>• The Impact of Workload on Operational Performance: Empirical Evidence from Last Mile Delivery. with Yuchen Liang, Stanley Lim, and Chung-Piaw Teo.</li> <li>• Agile Capacity Configuration in Supply Chain Networks. with Chung-Piaw Teo.</li> <li>• Humanitarian Relief Goods Allocation under Malicious Attacks. with Kaiming Xiao.</li> <li>• A Hybrid Algorithm for Network Revenue Management with Cancellations and No-shows. with Tingrui Shi, and Hailong Sun.</li> <li>• Allocation Fairness in Foodbank Operations. with Jinpeng Liang.</li> <li>• Resource Allocation Revisited: Does Fairness Matter? with Chung-Piaw Teo, and Ganggang Zhang.</li> </ul>	
<b>RESEARCH PROJECT</b>	<b>Co-PI</b> , NUS & IMDA Grant, Singapore (500, 000 SGD)	Jun. 2018 - Jun. 2020
	Topic: The Federated Lockers System: Analytical Tools for Implementation	
	<b>PI</b> , NUDT Graduate Innovation Program, China (20, 000 RMB)	Sep. 2013 - Jun. 2014
	Topic: Service-Oriented Dynamic Evolution of Command & Control Organization	
	<b>PI</b> , National University Student Innovation Program, China (40, 000 RMB)	Sep. 2010 - May 2012
	Topic: Development of Ubiquitous Online-Learning Platform and Mobile App for <i>Sinology</i>	
<b>CONSULTING PROJECT</b>	<b>PI</b> , BNU Student Innovation Program, China (2, 000 RMB)	Jun. 2009 - Nov. 2011
	Topic: Analysis of Learning Methods of Elementary and Secondary Students	
	<b>Co-PI</b> , BNU Student Innovation Program, China (2, 000 RMB)	Jun. 2009 - Nov. 2011
	Topic: Design & Development of Music-based Decompression Software for College Students	
	Singapore Pools	Jan. 2020 - Jun. 2020
	YTO Express (Shanghai, China)	Oct. 2019 - Jun. 2020
<b>TEACHING EXPERIENCE</b>	Singapore Pools	Jan. 2019 - Jun. 2019
	Didi Chuxing (Beijing, China)	Dec. 2017 - Jan. 2018
	Yamato Transport Singapore	Jan. 2016 - Jan. 2017
	P&G Singapore	Aug. 2015 - May 2016
	<b>Guest Lecturer</b>	
	Operations and Technology Management (DAO2703, NUS)	Semester 2 AY 2020/2021
	<b>Teaching Assistant</b>	
	Discrete Optimization and Algorithms (BDC 6302, NUS)	Semester 1 AY 2018/2019
	<b>Teaching Assistant &amp; Guest Lecturer</b>	
	Introduction to Optimization (DSC 3214, NUS)	Semester 2 AY 2017/2018
	<b>Guest Lecturer</b>	
	Introduction to Business Analytics (DAO 1704, NUS)	Semester 2 AY 2017/2018
<b>CONFERENCE PRESENTATION</b>	<b>Teaching Assistant &amp; Guest Lecturer</b>	
	Supply chain design and optimization (External Course, SJTU)	Semester 1 AY 2017/2018
	<b>Teaching Assistant</b>	
	Supply Chain Management (EMBA, NUS)	Semester 2 AY 2016/2017
	<b>Tutor</b>	
	Business Analytics (DSC 2008, NUS)	Semester 1 AY 2016/2017
	<b>Teaching Assistant</b>	
	Deterministic Operations Research Models (BDC 5101, NUS)	Semester 1 AY 2015/2016
	Adaptive Shortest-Path Network Interdiction	
	• Analytics for X 2021, Singapore	Jul. 2021
	Online Planning with Offline Simulation	
	• MSOM 2021, Virtual Conference	May 2021
	• Mostly OM 2019, Shenzhen, China	May 2019
	Last Mile Innovation: The Case of the Locker Alliance Network.	
	• POMS-HK 2019, Hong Kong, China	Jan. 2019
	• INFORMS Annual 2016, Nashville, USA	Nov. 2016
	The Logic of Matching in Ride Sharing Markets: Revenues, Service Ratings or Pick-Up Times?	
	• MSOM 2018, Dallas, USA	Jul. 2018

Stochastic Knapsack Revisited: Resource Allocation with Stock-Out Probability Targets.	
• POMS-HK 2017, Hong Kong, China	Jan. 2017
Inventory Management for Distribution Supply Chains.	
• MSOM 2016, Auckland, New Zealand	Jul. 2016

<b>PROFESSIONAL SERVICES</b>	Reviewer for <i>Operations Management Journals</i> <i>Management Science, Manufacturing &amp; Service Operations Management, Production and Operations Management</i> Reviewer for <i>Transportation Journals</i> <i>Transportation Science, Transportation Research Part B</i>
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<b>AWARDS</b>	Best Paper Award in the 2020 Doctoral Forum in Industrial Engineering, China	2020
	Finalist in 2019 George B. Dantzig Dissertation Award Competition, INFORMS	2019
	Best Paper Award in the 10th Workshop on Computational Transportation Science, China	2018
	Best Paper Award in the 6th NUS Business School Annual Ph.D. Research Day, Singapore	2017
	First Prize in the 5th NUS Business School Annual Ph.D. Research Day, Singapore	2016
	First Prize in the NUDT Annual Research Competition, China	2014
	Meritorious Winner in 2012 American Mathematical Modeling Contest, USA	2012
	First Prize in the 6th <Challenge Cup> Beijing Academic Sci. and Tech. Competition, China	2011
	Third Prize in the 12th <Challenge Cup> National Academic Sci. and Tech. Competition, China	2011
	First Prize in the 7th BNU Mathematical Modeling Contest, China	2011

<b>HONORS AND SCHOLARSHIPS</b>	President Graduate Fellowship, Singapore	2016 - 2018
	NUS Research Scholarship, Singapore	2014 - 2016
	Outstanding Graduate Award in Beijing City, China	2012
	Outstanding Graduate Award in BNU, China	2012
	Best Bachelor Dissertation Award in BNU, China	2012
	National Scholarship, China	2009 - 2011
	Distinguished Winner of National Scholarship, China	2010
	First-Class Scholarship in BNU, China	2009 - 2011
	<Bao Gang> Outstanding Student, China	2011
	The 11th BNU <Top-10 Outstanding Undergraduate> Award, China	2010
	The 11th BNU <Top-1 Popular Undergraduate> Award, China	2010
	The 10th BNU <Li Yun> Outstanding Undergraduate, China	2010
	Trip-A Student in Beijing City, China	2009 - 2010

<b>COMPUTER SKILLS</b>	MATLAB, R (R Shiny), Python, Java, C, Julia, $\text{\LaTeX}$ Adobe Premiere, Animate (Flash), Photoshop
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<b>REFEREES</b>	Available upon request.
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