## **Guodong LYU**

☑ oragl@nus.edu.sg | ♥ guodonglyu.github.io | ♦ (65) 9192 2082 # 04-01, Innovation 4.0, 3 Research Link, Singapore, 117602

**ACADEMIC** National University of Singapore (NUS) Singapore **EXPERIENCE** Research Fellow in the Institute of Operations Research & Analytics Jan. 2021

**NATIONAL** National University of Defense Technology (NUDT) **SERVICE** 

Changsha, China Lecturer in the College of Systems Engineering Jul. 2019 - Dec. 2020 Master Student in the College of Information System and Management Sep. 2012 - Jul. 2014

**EDUCATION** National University of Singapore (NUS)

Singapore Aug. 2014 - Jun. 2019 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

Beijing Normal University (BNU)

Beijing, China Bachelor of Science, School of Educational Technology Sep. 2008 - Jul. 2012

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

#### **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-

[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**

- Multi-objective Stochastic Optimization: A Case of Real-time Matching in Ride-sourcing Markets. with Wang-Chi Cheung, Chung-Piaw Teo, and Hai Wang. Working Paper. 2018.
- Online Planning with Offline Simulation. with Wang-Chi Cheung, Chung-Piaw Teo, and Hai Wang. Working Paper. 2019.
- Fair Allocation Algorithms for Cash Transfer Programs: Simultaneous and Static Policies. with Jiannan Ke, Chung-Piaw Teo, and Huan Zheng. Working Paper. 2020.
- Online Passenger Flow Control in Metro Lines. with Ziyou Gao, Jinpeng Liang, and Chung-Piaw Teo. Working Paper. 2020.
- Post-Disaster Humanitarian Logistics Planning: The Impact of Correlated Uncertainties. with Sheng Bi, and Yini Gao. Working Paper. 2020.
- Adaptive Shortest-Path 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.

#### **WORK IN PROGRESS**

- 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.
- The Impact of Workload on Operational Performance: Empirical Evidence from Last Mile Delivery. with Yuchen Liang, Stanley Lim, and Chung-Piaw Teo.
- Agile Capacity Configuration in Supply Chain Networks. with Chung-Piaw Teo.
- Humanitarian Relief Goods Allocation under Malicious Attacks. with Kaiming Xiao.
- Allocation Fairness in Foodbank Operations. with Jinpeng Liang.
- Resource Allocation Revisited: Does Fairness Matter? with Chung-Piaw Teo, and Ganggang Zhang.

#### RESEARCH **PROJECT**

Co-PI, NUS & IMDA Grant, Singapore (500, 000 SGD) Jun. 2018 - Jun. 2020 Topic: The Federated Lockers System: Analytical Tools for Implementation PI, NUDT Graduate Innovation Program, China (20, 000 RMB) Sep. 2013 - Jun. 2014 Topic: Service-Oriented Dynamic Evolution of Command & Control Organization PI, National University Student Innovation Program, China (40, 000 RMB) Sep. 2010 - May 2012 Topic: Development of Ubiquitous Online-Learning Platform and Mobile App for Sinology **PI**, BNU Student Innovation Program, China (2, 000 RMB) Jun. 2009 - Nov. 2011 Topic: Analysis of Learning Methods of Elementary and Secondary Students **Co-PI**, BNU Student Innovation Program, China (2,000 RMB) Jun. 2009 - Nov. 2011 Topic: Design & Development of Music-based Decompression Software for College Students

**CONSULTING** 

**PROJECT** 

Singapore Pools	Jan. 2020 - Jun. 2020
YTO Express (Shanghai, China)	Oct. 2019 - Jun. 2020
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

#### **TEACHING EXPERIENCE**

#### **Guest Lecturer**

Operations and Technology Management (DAO2703, NUS)	Semester 2 AY 2020/2021
Teaching Assistant	
Discrete Optimization and Algorithms (BDC 6302, NUS)	Semester 1 AY 2018/2019
Teaching Assistant & Guest Lecturer	
Introduction to Optimization (DSC 3214, NUS)	Semester 2 AY 2017/2018
Guest Lecturer	
Introduction to Business Analytics (DAO 1704, NUS)	Semester 2 AY 2017/2018
Teaching Assistant & Guest Lecturer	
Supply chain design and optimization (External Course, SJTU)	Semester 1 AY 2017/2018
Teaching Assistant	
Supply Chain Management (EMBA, NUS)	Semester 2 AY 2016/2017

May 2019

Tutor

Business Analytics (DSC 2008, NUS) Semester 1 AY 2016/2017

**Teaching Assistant** 

Deterministic Operations Research Models (BDC 5101, NUS) Semester 1 AY 2015/2016

#### **CONFERENCE PRESENTATION**

Adaptive Shortest-Path Network Interdiction Amalatica for V 2021 C:

• Mostly OM 2019, Shenzhen, China

• Analytics for X 2021, Singapore	Jul. 2021
Online Planning with Offline Simulation	
<ul> <li>MSOM 2021, Virtual Conference</li> </ul>	May 2021

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

### PROFESSIONAL

Reviewer for Operations Management Journals

SERVICES Management Science, Manufacturing & Service Operations Management, Production and Operations Man-

agement

Reviewer for *Transportation Journals* 

Transportation Science, Transportation Research Part B

#### **AWARDS**

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</challenge>	2011
Third Prize in the 12th <challenge cup=""> National Academic Sci. and Tech. Competition, China</challenge>	2011
First Prize in the 7th BNU Mathematical Modeling Contest, China	2011

# HONORS AND SCHOLARSHIPS

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</bao>	2011
The 11th BNU <top-10 outstanding="" undergraduate=""> Award, China</top-10>	2010
The 11th BNU <top-1 popular="" undergraduate=""> Award, China</top-1>	2010
The 10th BNU <li yun=""> Outstanding Undergraduate, China</li>	2010
Trip-A Student in Beijing City, China	2009 - 2010

#### COMPUTER SKILLS MATLAB, R (R Shiny), Python, Java, C, Julia, LATEX

Adobe Premiere, Animate (Flash), Photoshop

**REFEREES** 

Available upon request.