#### **Guodong LYU**

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

NATIONALNational University of Defense Technology (NUDT)Changsha, ChinaSERVICELecturer in the College of Systems EngineeringJul. 2019 - Dec. 2020Master Student in the College of Information System and ManagementSep. 2012 - Jul. 2014

EDUCATION National University of Singapore (NUS) Singapore
Ph.D. in Management, NUS Business School 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, ChinaBachelor of Science, School of Educational TechnologySep. 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), 1297-1313.

[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 Ziyou Gao, Jinpeng Liang, and Chung-Piaw Teo. Minor Revision in *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 in *Manufacturing & Service Operations Management*. 2020.
- Fair Allocation Algorithms for Cash Transfer Programs: Simultaneous and Static Policies. with Jiannan Ke, Chung-Piaw Teo, and Huan Zheng. Major Revision in *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 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.
- A Hybrid Algorithm for Network Revenue Management with Cancellations and No-shows. with Tingrui Shi, and Hailong Sun.
- 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)

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) Teaching Assistant

Discrete Optimization and Algorithms (BDC 6302, NUS)

Semester 1 AY 2018/2019

Semester 2 AY 2020/2021

**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

**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

Analytics for X 2021, Singapore
 Online Planning with Offline Simulation

 MSOM 2021, Virtual Conference
 Mostly OM 2019, Shenzhen, China

 May 2021
 May 2019

Last Mile Innovation: The Case of the Locker Alliance Network.

POMS-HK 2019, Hong Kong, China
 INFORMS Annual 2016, Nashville, USA
 Jan. 2019
 Nov. 2016

The Logic of Matching in Ride Sharing Markets: Revenues, Service Ratings or Pick-Up Times?

• MSOM 2018, Dallas, USA Jul. 2018

PROFESSIONAL SERVICES	Stochastic Knapsack Revisited: Resource Allocation with Stock-Out Probability Targets.  • POMS-HK 2017, Hong Kong, China Inventory Management for Distribution Supply Chains.  • MSOM 2016, Auckland, New Zealand  Reviewer for Operations Management Journals  Management Science, Manufacturing & Service Operations Management, Production and Operagement	Jan. 2017  Jul. 2016  erations Man-
	Reviewer for Transportation Journals Transportation Science, Transportation Research Part B	
AWARDS	Best Paper Award in the 2020 Doctoral Forum in Industrial Engineering, China Finalist in 2019 George B. Dantzig Dissertation Award Competition, INFORMS Best Paper Award in the 10th Workshop on Computational Transportation Science, China Best Paper Award in the 6th NUS Business School Annual Ph.D. Research Day, Singapore First Prize in the 5th NUS Business School Annual Ph.D. Research Day, Singapore First Prize in the NUDT Annual Research Competition, China Meritorious Winner in 2012 American Mathematical Modeling Contest, USA First Prize in the 6th <challenge cup=""> Beijing Academic Sci. and Tech. Competition, Chin Third Prize in the 12th <challenge cup=""> National Academic Sci. and Tech. Competition, First Prize in the 7th BNU Mathematical Modeling Contest, China</challenge></challenge>	2017 2016 2014 2012 na 2011
HONORS AND SCHOLARSHIPS	President Graduate Fellowship, Singapore NUS Research Scholarship, Singapore Outstanding Graduate Award in Beijing City, China Outstanding Graduate Award in BNU, China Best Bachelor Dissertation Award in BNU, China National Scholarship, China Distinguished Winner of National Scholarship, China First-Class Scholarship in BNU, China <bao gang=""> Outstanding Student, China The 11th BNU <top-10 outstanding="" undergraduate=""> Award, China The 10th BNU <li yun=""> Outstanding Undergraduate, China Trip-A Student in Beijing City, China</li></top-10></bao>	2016 - 2018 2014 - 2016 2012 2012 2012 2019 - 2011 2010 2010 2010 2010 2010 2010 2010

## COMPUTER SKILLS MATLAB, R (R Shiny), Python, Java, C, Julia, La Adobe Premiere, Animate (Flash), Photoshop

Available upon request. REFEREES