Guodong LYU

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⌂ # 04-01, Innovation 4.0, 3 Research Link, Singapore, 117602

ACADEMIC EXPERIENCE	**National University of Singapore (NUS)**	Singapore
	Research Fellow in the Institute of Operations Research & Analytics	Jan. 2021
NATIONAL SERVICE	**National University of Defense Technology (NUDT)**	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
	Ph.D. in Management, NUS Business School	Aug. 2014 - Jun. 2019
	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), 1297-1313.

[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

● 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.
	● 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$)$		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
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		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

PROFESSIONAL SERVICES   Reviewer for *Operations Management* Journals
Management Science, Manufacturing & Service Operations Management, Production and Operations Management
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	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

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	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

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

REFEREES   Available upon request.