# **Xiaodong WANG**

Lee Kong Chian School of Business, Stamford Road, Singapore 178899

(+65)9885-3877 <u>xdwang.2020@pbs.smu.edu.sg</u> Skype ID: live:wangxiaodong\_28

EDU	JCATION	
Singapore Management University, Lee Kong Chian School of Business, Singapore		Aug. 2020-Present
$\succ$	Ph.D. student, Ph.D. program in Business (Operations Management)	
Tongji University, School of Economics and Management, China		Sep. 2017-Apr. 2020
$\triangleright$	Master in Management Science and Engineering	
$\succ$	GPA: 4.4/5.0	
Nanjing University of Aeronautics & Astronautics, College of Economics and Management, China		Sep. 2013-Jun. 2017
$\triangleright$	Bachelor in Industrial Engineering	

## TRAINING

EDUCATION

- Probability and statistics
- Operations research
- Coding: MATLAB, Python, C++

## **RESEARCH EXPERIENCES**

- Bi-objective production scheduling with energy consideration
  - Analyzed the working flow of real-world gate assignment procedure, clustered related gates according to their distinct characteristics with realistic operational data, visualized these results.
  - Constructed and validated the multi-objective airport gate assignment MIP model with MATLAB/C++ and CPLEX.
  - Designed and implemented a rule-based algorithm and an NSGA-II-based evolutionary algorithm with rolling horizon approach in MATLAB, facilitated the airport gate scheduling under large-scale scenario.
- > Real-world hybrid flow-shop scheduling problem of Unilever Corp. Ltd/Hefei
  - Collected related data in the field research in Unilever Corp. Ltd in Hefei, developed the mathematical formulation of this two-stage no-wait hybrid flow-shop scheduling problem.
  - Designed the model-based heuristic method and problem-tailored genetic algorithm and tabu search algorithm.

# Multi-objective airport gate assignment in Guangzhou Baiyun International Airport Oct. 2016-Jun. 2017

- Clarified research streams, found the research gap, conducted literature review, constructed bi-objective MIP formulations, and implemented exact Epsilon-constraint method with Python and GUROBI.
- Developed problem-tailored constructive heuristic and bi-objective meta-heuristic algorithms, i.e., NSGA-II, Tabu Search and Ant Colony Optimization algorithm to tackle industrial-scale instances.
- Conducted extensive computational experiments and real-world case study, illustrated the performance of above algorithms.

# HONORS AND AWARDS

- 2019 Academic Pioneer Award in Tongji University
- > 2019, 2018 China National Graduate Scholarship
- 2016 Excellent Graduation Project in NUAA

#### Oct. 2017-Jan. 2019

Feb. 2018-Oct. 2018