# **Yang Shan**

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github.com/seanys

#### PERSONAL SUMMARY

Senior student from MS&E of Tongji University who has a well academic background in operations research and is good at coding&mathematics. Interested in IE&OR and willing to be devoted to this field for the next decades.

#### **EDUCATION**

Tongji University Sep. 2017 - July 2021

Bachelor of Management in Management Information System

Shanghai

- GPA [2018 Fall 2020Spring]: 90.86/100.00
- Courses: Operations Research, Operations Management [Assignment&Notes], Data Structure and Algorithm [Code], Decision Simulation [Code], Modern Logistics Management, Operations System, Database Technology and Application, Applied Statistics, etc.
- Audited Graduate Course: Optimization Theory [Code].

#### **Fudan University**

Sep. 2017 - July 2019

Minor Bachelor Degree of Law

Shanghai

• Courses: Constitution, Civil Law, Contract Law, Commercial Law etc.

#### RESEARCH EXPERIENCE

#### 2D Irregular Packing Problem

Undergraduate Research

- <u>Use modified penetration depth and guided search to solve nesting problem [Code&Intro]:</u> Our results are close or even better than the best results on benchmarks with guided global search.
- <u>Learn to pack with reinforcement learning [Code&Intro]</u>: We replaced the heuristic criteria for nesting problem with RL methodology and have gotten better results on some data sets.
- Algorithms for Nesting Problem [Code]: Realize classic algorithms for the packing problem with Python&C++ such as NFP, GA, TOPOS, Fast Neighborhood Search, Guided Cuckoo Search, etc.

### Supply Chain&Simulation

Undergraduate Courses Design

- <u>Use anyLogistix to simulate flexible production networks [Work&Intro]:</u> Build three types of supply chains for last-mile delivery in Singapore and compare their service levels. Advisor: Wang Yunfeng
- <u>Simulate airplane boarding process [Code&Intro]</u>: Write a literature review on this topic and simulate a simple boarding process with Python. Advisor: Prof. Hu Zhaolin
- <u>Aircraft Maintenance Assistant [Code&Intro]:</u> Project for Singapore Airlines APP Challenge 2019. Advisor: Prof. Liang Zhe

## **HONOURS**

- Tongji Innovation and Entrepreneurship Scholarship. The only undergraduate student.
- "Internet +" College Students Innovation and Entrepreneurship Competition, Shanghai Second Prize. The only undergraduate principal in our school who won this level of prize.

#### SKILLS&LANGUAGE

- Language: Familiar with English, score of TOEFL&GRE will be updated soon
- Coding: Python and Libraries in common use, C++, Web Development
- Software: Skilled in PowerPoint, familiar with Excel and Latex
- Soft Skill: Leadership, Presentation, Communication