# SHUNYU YAO

### ➤ William. YaoSh@outlook.com ·

# **EDUCATION**

### Southern University of Science and Technology (SUSTech), China

Sep. 2020 - Jun. 2023

Master student in Electronics Science and Technology (EE)

GPA: 3.33/4

Major courses: Advanced algorithm, advanced artificial intelligence

**Interesting:** Deep learning, reinforcement learning, combinatorial optimization, multi-objective optimization.

### Southern University of Science and Technology (SUSTech), China

Sep. 2016 – Jun. 2020

B.S. in Computer Science (CS)

**GPA: 3.5/4**, Postgraduate recommendation.

Major courses: Deep learning, probability theory, discrete mathematics, artificial intelligence

Interesting: Millimeter wave radar, deep learning.

# **EXPERIENCE**

**Intern:** Real-time Water Surface Object Detection

Jan. 2022 – Jun. 2023

The real-time objective detection algorithm is designed based on multi-task learning and transfer learning.

**Teacher Assistant:** System Design and Management

Feb. 2021 – Jun. 2021

Teaching the discrete optimization algorithms: dynamic programming, simplex, branch and bound, etc.

**Reviewer:** Memetic Computing

Jun. 2021-

### RESEARCH

- [1] Zhenkun Wang, Qingfu Zhang, Yew-Soon Ong, **Shunyu Yao**, Haitao Liu, and Jianping Luo. **Choose appropriate subproblems for collaborative modeling in expensive multiobjective optimization**. *IEEE Transactions on Cybernetics*, 2021. First Student Author.
- [2] Zhenkun Wang\*, Shunyu Yao\*, Genghui Li, and Qingfu Zhang.Multi-objective Combinatorial Optimization Using A Single Deep Reinforcement Learning Model. *IEEE Transactions on Cybernetics*, Unber review. \*Equal contribution.
- [3] Shunyu Yao, Xi Lin, Zhenkun Wang, and Qingfu Zhang. Data-efficient Supervised Learning is Powerful for Neural Combinatorial Optimization. Association for the Advancement of Artificial Intelligence, Unber review.
- [4] Zhi Zheng\*, Shunyu Yao\*, Genghui Li, and Zhenkun Wang. Decomposition-based Pareto Improver: A Population-based Reinforcement Learning Method for Multi-objective Combinatorial Optimization. Preprint. \*Equal contribution.

# SKILLS

- Programming Languages: Python, Matlab, C++, Java
- Data Science: PyTorch, TensorFlow, Keras, Pandas, Scikit-learn

### ○ Honors and Awards

Graduate Scholarship Award

Sep. 2020 – Jun. 2022

Freshman Scholarship Excelence Award

Jun. 2016

#### i Miscellaneous

• Languages: Mandarin (Native), English (TOEFL iBT: 105, R: 28, L:30, S: 23, W: 24)