ZEYUAN MA

Status: Ph.D student, South China University of Technology (SCUT)

Interests: Reinforcement Learning, Automated Algorithm Design

▶ Skills: Cooking, Singing, Swimming, Coding & Brain-Storming

▶ Languages: English (CET 6), French (DELF 4), Mandarin

▶ Homepage: https://scholar.google.com/citations?user=Jcy8wPgAAAAJ



Education

2018 - 2022 **B.Eng. Degree of Computer Science** South China University of Technology ▶ GPA: 3.71/4, 2nd place in 22 students, with 1st place in innovation ability evaluation. ▶ Educated Courses: Artificial Intelligence, Deep Learning and Neural Network, etc. Thesis: "Acceleration Framework for Multi-task Evolutionary Algorithm through DRL". 2022 - Present Ph.D. Degree of Computer Science South China University of Technology **Supervisor**: Prof. Yue-Jiao Gong, Full Professor, Associate Editor of IEEE TEVC. Research Topic: "Meta-Black-Box-Optimization: Framework and Application". Team & Projects: MetaEvo research group (https://metaevo.github.io/) in Computational Intelligence Lab, SCUT, funded by National Natural Science Foundation of China. Visiting Ph.D. of Computer Science 2025 - Present Singapore Management University

- **Supervisor**: Prof. Zhiguang CAO, Assistant Professor. ■
- Research Project: "Understanding Black-Box-Optimization under DNN Representations".

About Me

I received my B.Eng. degree in School of Computer Science and Engineering, South China University of Technology (SCUT), Guangzhou, China, in 2022. I am currently pursuing the Ph.D. degree at South China University of Technology, China, supervised by Prof. Yue-Jiao Gong. I research at the intersection of Machine Learning and Optimization, exploring automated algorithm design in Evolutionary Computing through meta learning. I have (co-) authored over 20 publications, most of which are published in top-tier conferences and journals such as ICML, ICLR, NeurIPS and IEEE TEVC. I have also actively served as reviewers for these advanced conferences and journals. Recently, I have organized LEAD 2025 Workshop (https://sites.google.com/view/leadworkshop2025).

Featured Publications

- MetaBox: A Benchmark Platform for Meta-Black-Box Optimization with Reinforcement Learning, NeurIPS 2023 (Oral).
- > Symbol: Generating Flexible Black-Box Optimizers through Symbolic Equation Learning, ICLR 2024.
- Neural Exploratory Landscape Analysis for Meta-Black-Box-Optimization, ICLR 2025.
- ConfigX: Modular Configuration for Evolutionary Algorithms via Multitask Reinforcement Learning, AAAI 2025 (Oral).
- Meta-Black-Box-Optimization through Offline Q-function Learning, ICML 2025.
- Toward Automated Algorithm Design: A Survey and Practical Guide to Meta-Black-Box-Optimization, TEVC (2025).
- LLaMoCo: Instruction Tuning of Large Language Models for Optimization Code Generation, TEVC (2025).
- MetaBox-v2: A Unified Benchmark Platform for Meta-Black-Box Optimization, NeurIPS 2025.
- DesignX: Human-Competitive Algorithm Designer for Black-Box Optimization, NeurIPS 2025.

Awards & Honors

- ▶ 17th "Challenge Cup" National Technology Competition, Champion of Guangdong Province, 2021.
- China National Scholarship, 2021.
- ➤ China National PhD Scholarship, 2025.
- > Presidential Fellowship, SCUT, 2025.