# YANG Luming



Background			
Burton International School Detroit, Michigan, U.S.A.	Jan. 2010 – Jan. 2011		
Guangzhou No.2 Middle and High School	Sept. 2014 -Jun. 2020		
- leader of student Information and Science Technology Department			
Southern University of Science and Technology	Sept. 2020 - till now		
Bachelor of Engineering in Computer Science and Technology	Shenzhen, Guangdong		
- Overall GPA: 3.4/4.0 (3.68 in Junior Semester) Weighted Avg. Score: 84.14/100			
Main Course:			
- *Deep Learning *Artificial Intelligence *Software Engineering	Operating System		
Computer Security Computer Networks *Data Mining	Discrete Mathematics		
Probability and Statistics *Com. Sys. Design and Application *Algorit *Represents co	hm Design and Analysis ourse project receive full marks		
Organizing Experience:			
- President of SUSTech Red Cross (Student)			
- Leader of SUSTech Emergency Rescue Association			
- Vice President of the School Volleyball Club			
The Hong Kong Polytechnic University   Exchange (Admitted)	Jan. 2024 - May 2024		
Honors			
National Olympiad in Informatics and Collegiate Programming Contest	_		

-	National Olympiad in Informatics in Provinces (Senior/Junior) – First Prize (thrice)	2018 etc.	
-	SUSTech Collegiate Programming Contest – Second Prize	2022	
International Genetically Engineered Machine Competition (iGEM)			
-	Silver Medal (Contribution: Visualization, Wiki Coding, Conceptualization)	2023	
China International Collegiate "Internet+" Innovation and Entrepreneurship Competition			
-	intramural competition – First Prize (First Place)	2023	
Scholarship			
-	University Motto Scholarship (Dean's Scholarship) (1%)	2023	
-	National Scholarship Nomination (2%)	2023	
-	The Third Prize Scholarship of University (15%, twice)	2021/2022	
St	udent Honors		
-	Outstanding Youth in Guangdong Province (unique in the University)	2023	
-	Excellent student of SUSTech	2021	
-	Outstanding volunteer of SUSTech	2021	
-	Ethic Award of SUSTech	2022	
Sports and Hobbies			
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- National Level China ARDF (Radio Orienteering) Youth Championship the First (champion)
- Municipal Level Shenzhen Volleyball Championship (University cup) the First (champion)
- Zhicheng College group badminton league the First (champion)

#### **Guangdong Youth Big Data and New Media Center**

Aug. 2020 - Sept. 2020

Internship - Responsible for information retrieval, and data analysis

- Collected and processed data, generated visual representations to present insights from BiliBili and WeChat, aiding in better decision-making and project planning.
- Due to data confidentiality, a similar project of mine can be referred. GitHub Repo: AnalyzeSOF

## **Evolving Machine Intelligence Lab of SUSTech ☑**

Jun. 2021 till now

Research Assistant

- Participated in developing the parallel and distributed evolutionary algorithm acceleration library EvoX, and was responsible for the development of evolutionary algorithms that meet the parallelization and functional programming standards using library JAX developed by google.
- GitHub Repo: EvoX Library Report: EvoX Group Research Report

### **Projects**

#### GPU-Accelerated Parallel Ant Colony Optimization | Advisor: Prof. Ran Cheng

Sept. 2023

- Implemented an algorithm that adheres to functional programming and Google's JAX standards.
- Orchestrated the entire algorithm process to be tensorized and deterministic.
- Offered a more versatile GPU-Accelerate solution compared to traditional parallel ACOs.

# Capacitated Arc Routing AI Based on Heuristic Genetic Algorithm

Dec. 2022

- Developed an algorithm for Capacitated Arc Routing Problem, introduced a unique crossover operator and shuffle process to optimize solutions, with a focus on reducing local optima.
- Conducted algorithm analysis, experiments on distinct datasets. Article: Heu. GA for CARP

#### Traffic Sign Detection with YOLOv8 | Advisor: Prof. Jianguo Zhang

May 2023

- YOLOv8 on Edge Device Jetson Nano for traffic sign recognition. Report: <u>Traffic Sign Detection</u>
- Designed experiment, including dataset establishment, parameter adjustment, accelerating.

#### **Interactive Fund Management System for C.S. Dept.**

Mar. 2023

- Github Repo: <u>SUSTech ACD</u> <u>Project Report</u> (En) <u>Documentation</u> (Ch) <u>API docs</u> (Ch) **Other intriguing projects** on my GitHub, including Chess game and chat room applications.

# **Voluntary Experience**

#### Total Volunteer Service Hours: 499.25 h

2020 till now

- Including sport events, academic conferences and competitions, caring for vulnerable group etc.

#### **Student President of SUSTech Red Cross**

2022 till nou

- Founded the SUSTech Red Cross (Student), gained recognition as one of the five campus-level student orgs. Achieved the distinction of "Red Cross Standard School" in Guangdong province.
- Organized a variety of volunteer events, campus charity markets, and fundraising initiatives.
- Conducted first aid course including CPR for students and staff, with over 2,000 trained.

#### **Campus Volunteer First Aid Responder**

2020 till now

- Responded to over 60 emergencies, effectively managing diverse situations, including suspected cases of epilepsy, fractures, trauma, heatstroke, hyperventilation, and snake bites.
- Avg. response time less than 3 mins, significantly faster than the avg. ambulance arrival time.
- Honored with 'SUSTech Emergency Rescue Model' for outstanding contributions, twice.

#### Others

- English Proficiency: TOEFL-100, CET-4/6, have experience of overseas studying and oral translating, well-equipped to seamlessly integrate English into both academic and endeavors
- AHA HeartSaver®, Red Cross First Aid Certificate, China Red Cross Rescue Mentor qualification
- Radio Operator License (Level A), National Volleyball Referee certificate (Level 2)