

Shun Zhang

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 Hefei, Anhui, China
 China

Education

Bachelor of Engineering in Electronics Information Engineering

Bachelor's degree program

Anhui University

Sep 2023 – Present

Courses Taken:

Linear Algebra (100/100), Advanced Programming (99/100), Signals and Linear Systems (99/100), Electronic Circuits (99/100), Probability and Statistics, Discrete Mathematics, Digital Signal Processing, Information Theory and Coding, Digital Circuits and Logic Design, Communication Principles, Electromagnetic Fields and Waves, Complex Variables, Advanced Mathematics.

GPA: 4.31/5.0 (Ranking: Top 3%)

Publications/Preprints

Reinforcement Learning-Based Adaptive Fuzzy Control for Mecanum-Wheeled Vehicle With Input-and-Output Constraints

Yuncheng Ouyang, Youmeng Wang, **Shun Zhang**, Xuerao Wang, Changyin Sun (Under Review at Acta Automatica Sinica)

Intermediate-Time Output Constrained Adaptive Neural Control for an Uncertain Mecanum-Wheeled Omnidirectional Vehicle System

Yuncheng Ouyang, **Shun Zhang**, Youmeng Wang, Yanxu Su, Changyin Sun (Under Review at IEEE Transactions on Control Systems Technology)

Research Projects

Collaborative Campus Inspection Platform Based on Deep Learning

National Innovation Training Program

2024 – 2025

Anhui University

- Led the edge computing deployment of lightweight YOLO models for real-time object detection.
- Engineered autonomous navigation and obstacle avoidance algorithms for Unmanned Ground Vehicles (UGV).

Traffic Sign Detection and Recognition on Huawei Ascend

National Innovation Training Program (Graded Excellent)

2024 – 2025

Anhui University

- Optimized and deployed YOLOv5 models on Huawei Ascend 310B edge computing platforms (OrangePi AIpro) via the CANN architecture.
- Designed a highly efficient inference pipeline and conducted rigorous testing, ensuring robust real-time traffic sign recognition on embedded devices.

Embodied AI-Based Full-Domain Delivery System

Innovation Training Program (Under Review)

2025 – 2026

Anhui University

- Designed a modular system architecture for quadruped robot logistics (Robot Dog).
- Developing diffusion-based generative models for real-time trajectory generation in mapless indoor navigation.
- Integrating Reinforcement Learning (RL) to solve path planning challenges in unstructured complex environments.

Technical Skills

Languages

Python, C/C++, MATLAB, Assembly, Shell

Frameworks & Tools

PyTorch, YOLO, OpenCV, ROS, STM32, Linux, Git, LaTeX

Honors & Awards

RAICOM	National First Prize (Developer Competition)	2025
CUMCM	National Second Prize	2025
NUEDC	Provincial First Prize (Anhui)	2025
	Provincial Third Prize (Anhui)	2024
Intelligent Car Comp.	Provincial Second Prize (Anhui)	2024
Scholarships	Guoyuan Scholarship	2024
Honorary Titles	Merit Student, Outstanding League Member	2024

Leadership & Experience

Electronic Innovation Laboratory 2024 – Present
Lab Manager Anhui University

- Managed daily lab operations, equipment maintenance, and component procurement.
- Facilitated technical seminars and coordinated training sessions for 50+ members participating in competitions.