

# Zijun Wang

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## Education

### Sun Yat-sen University

Undergraduate  
Major in Intelligent Science and Technology  
2021.09 - Present

## Links

Blog:  
**cleversmall.com**

Github:  
**lankoestee**

## GPA

Overall  
**3.8/5.0** • 32/110  
Past two semesters  
**4.33** • 1/110  
**4.20** • 6/110

## Courses Taken

Advanced Mathematics  
Linear Algebra  
Probability Theory  
Deep Learning  
Computer Vision  
Natural Language Processing  
Fundamentals of Autopilot  
Digital Logic Design  
Signal and System  
Optimization Theory and Method

## Skills

More Proficient  
Python • C++ • ROS • PyTorch •  
~~LaTeX~~  
More Familiar  
C • MatLab • C# • Unity

## Languages

CET-6 • 543  
CET-4 • 600

## Research Experience

### Optimization of an indoor drone obstacle avoidance system based on TX2\_NX Leader

2022.11 - 2023.11 | Supervised by: Ximin Lv

- Received funding from the Sun Yat-sen University Student Innovation and Entrepreneurship Training Program, with a ranking in the top 20% during the evaluation and defense.
- Developed and integrated an ego-planner indoor obstacle avoidance system based on the TX2\_NX and Coolpi onboard computers.

### Storytelling Video Generation Leader

2024.02 - Present | Supervised by: Xiaodan Liang

- The goal is to develop a story-based video generation model base on the consistency of tasks and cross-clip video generation.
- The project is still ongoing.

## Awards and Honors

### China university Aircraft Design Competition First Prize

2022.12

- Achieved level-flight of a small rocket with altitude error much lower than the second place.
- Responsible for electromechanical system design and control algorithm implementation.

### China Robot Competition and RoboCup China Open Second Prize

2023.10

- Completed the indoor drone package delivery and obstacle avoidance task.
- There was no prior history of participation in this competition from our school, so we started from scratch and explored the process.
- Used Ego-Planner and VINS fusion-based localization and obstacle avoidance, combined with YOLO for object detection.

### Mathematical Contest in Modeling Honorable Mention

2023.02

### Others

2023	Third Prize	China Undergraduate Mathematical Contest in Modeling
2023	Second Prize	Sun Yat-sen University Scholarship
2022	Third Prize	Undergraduate Research Competition on Assisting Rural Revitalization
2022	Third Prize	Sun Yat-sen University Scholarship

## Partial Coursework

### rrtpd-planer ROS•Python

- Manually implemented the RRT-based path planning algorithm and PD controller algorithm.
- Accumulated full-stack ROS project experience from map generation, path planning to control.

### Plant Pathology 2021 PyTorch•Python

- Used PyTorch to implement an effective plant pathology image classifier based on Swin Transformer, Query2Label, and FPN.
- Accumulated PyTorch coding and deep learning project experience.

### MetroSearch Qt•C++

- Implemented a metro transfer route query system using C++ and Qt that can retrieve information on all cities nationwide, with over 2,000 lines of code.
- Gained basic C++ project experience.