DA ZHOU

Gender: Male Ethnicity: Han Native Place: Ningbo,

Zhejiang

Contact Information: 15356093052 Email: 16961599@qq.com

Current Location: Hangzhou Preferred Location:

Hangzhou

Preferred Positions: Python Software Development Intern or Automation Control Engineer Intern,

Education Background

2018.9 - 2021.6 Yuyao High School

2021.9 - 2025.7 Hangzhou Dianzi University Automation Bachelor's Degree 2025.9 - 2026.7 University of Manchester Robotics Master's Degree

Academic Performance: Undergraduate GPA 4.1/5.0;

Professional Courses: Machine Vision, Analog Circuit Technology, Principles of Automatic Control,

Deep Learning, Computer Networks

Honors at School: National College Students' Intelligent Robot Competition, Fighting Group, Third

Prize at Provincial Level

Professional Skills: Python programming language, familiar with Java language and its ecosystem Proficient in PyTorch and PaddlePaddle deep learning frameworks, with experience in model development and optimization

Capable of conducting relevant transfer learning using PaddleOCR or Yolo models

Spring ecosystem (Spring Boot, Spring MVC, MyBatis)

Able to design and optimize databases using MySQL and MongoDB, and proficient in database performance tuning

Familiar with development tools such as Anaconda and PyCharm, with strong engineering development capabilities

Familiar with ROS ecosystem

Language proficiency: IELTS 7.0, CET-6 passed.

Competition experience

- **1. Image Processing and Motion Control:** During the competition, to achieve the goal of vehicle debugging and control, I was responsible for writing the code for image processing and motion control algorithms in the Python software development environment. I utilized sensors such as cameras and single-line LiDAR to complete the low-level steering of the servo and the movement control of the motor.
- **2. Common Bug Fixing:** Bugs frequently occurred in the software. I was familiar with disassembling the entire system, conducting breakpoint testing, and other methods to correct and optimize severe bugs, ultimately ensuring the smooth and efficient operation of the software system.
- **3. Technical Document Compilation:** According to the competition requirements, I summarized, analyzed, and archived the team's technologies, and compiled technical files.
- **4. Team Organization, Planning, and Communication Skills:** To rationally plan team goals and share team information, I completed the efficient operation of the organization and maintained a harmonious



team atmosphere by pre-planning task goals and communicating with team members.

internship experience

Hangzhou Huidian Information Co., Ltd. | Back-end Developer (Python Direction) 2024.6 - 2024.9

- 1. Developed a document processing system based on deep learning and seal recognition: Utilized PyTorch and paddlepaddleOCR for seal recognition, and integrated TesseractOCR to build a text recognition pipeline.
- 2. Designed a contract comparison engine: Employed OpenCV template matching and text similarity algorithm (Cosine Similarity) to automatically mark differences in contract terms.
- 3. Set up a team shared development environment (Docker + GitLab), encapsulated Python programs using Docker, and collaborated with Java back-end developers for data transmission. Managed versions using Markdown + Git.
- **Hangzhou Wonder-Light Smart Energy Co., Ltd. | Python Development Intern**
- *Jun 2025 Sep 2025*

Engineered an intelligent obscuration detection system for solar panels utilizing Python and OpenCV for image preprocessing and augmentation.

Trained and fine-tuned custom deep learning models using YOLO for object detection and U-Net (or similar) for semantic segmentation to accurately identify and locate obstructions like bird droppings, dust, and leaves.

Developed an image processing module to perform pixel-level analysis on detected regions, precisely calculating the percentage of obscuration area to assess impact on power generation efficiency.

Improved the model's mean Average Precision (mAP) on the test set by optimizing hyperparameters and applying data augmentation techniques, effectively supporting the O&M team's cleaning decisions.