Lu, Yiyuan

Ocean University of China Computer Science and Technology
(+86) 151-6950-7851 anduin3054@icloud.com
github.com/Shadow-Song

I am an undergraduate student currently studying in Ocean University of China majoring in Computer Science and Technology. My best technology stack is iOS native development, and I am proficient in using frameworks such as SwiftUI, Moya and SwiftyJSON. Therefore, I would like to intern in the iOS development department of your company to improve my technical level and at the same time contribute to the development of the company.

Education

2021.09 - 2024.06 | **Ocean University of China** · School of Computer Science · Computer Science and Technology
2024.09 - 2025.06 | **Heriot-Watt University** · School of Mathematical and Computer Sciences · Engineering in Robotics

Skills

Operating System	Linux, MacOS, Windows
Programming Language	Swift, Python, C, Java, ARM Assembly
Proficient Framework	SwiftUI, FastAPI, Flask, MySQL, Linux
Knowledgeable	OpenCV, Machine Learning
English	IELTS 6.0 (Listening 5.5, Speaking 6.0, Reading 5.5, Writting 6.0)

Awards

Challenger Cup 2023	**National Third Prize**	December 2023
MCM 2024	**S Prize**	May 2024
OUC Bursary 2023	**Innovation Bursay**	October 2023

Projects

Ocean BB Lite **Personal Project** December 2023 - Present

iOS, SwiftUI, FastAPI, MySQL

Designed for undergraduates of Ocean University of China, it connects to the university's Blackboard platform and provides functions such as assignment query, to-do list and assignment submission.

- Encapsulation of the Blackboard API using Moya and SwiftyJSON, enabling access to the school's Blackboard platform.
- Use SwiftUI to build interface.
- Use FastAPI to build back-end with MySQL to realize job reminder function.
- From the front and back end implementation to filing and listing on the App Store, it is completely completed by individuals.

Robot Car Based on RPi 4B **Course Project** September 2023 - January 2024

Python, Linux, OpenCV, GPIO

The robot car based on Raspberry Pi 4B realizes automatic tracking, obstacle avoidance, remote control and other functions.

- Using OpenCV for image processing, automatic tracking function is realized.
- Use Python to control GPIO and the connected sensor and motor to achieve obstacle avoidance.

- The remote control function is realized by connecting the DualShock 4 controller with the PyGame library using Bluetooth.

Machine Arm Based on Jetson **Course Project** February 2024 - June 2024

Python, Linux, YoloV5, Dji-RoboMaster

The robotic arm based on Jetson Nano realizes functions such as automatic grasp and recognition of cans of different colors.

- The YoloV5 model was trained with its own data set to recognize cans of different colors
- Use Python to control the robot arm, and realize the function of automatically grasping and placing in different positions
- Use Python to control Dji-RoboMaster and realize the function of fixed point movement

🏛 Clubs

iOS Club Technical Director September 2022 - Present

With no teacher to teach related knowledge, I taught myself iOS development and SwiftUI, and organized many online activities to help students learn iOS development. Helped the community build the iOS knowledge system, and produced the first project for the newly established iOS Club.