

TIAN Jingyi

+86 15621159951 | Tianjingyi55@gmail.com

EDUCATION

Ocean University of China

Bachelor of Engineering in Intelligent Science and Technology

Qingdao, Shandong

Sept. 2021 – Jun. 2025

- **GPA:** 3.38/4.0 (**Rank:** 7/45)
- **Language Level:** IELTS 6.5(6.0), TOPIK 5
- **Relevant Coursework:** Artificial Intelligence, Software Engineering, Introduction to Robotics, Software Testing Techniques, Operating Systems, Introduction to Computer Science and Technology
- **Honors and Awards:** National Endeavor Fellowship; Outstanding Student Award; Second-class and Third-class Scholarship of OUC; Excellent Team in the Summer Social Practice Activities for Students organized by the Communist Youth League Committee of OUC; “Blue Bridge Cup” Provincial Third Prize

PROJECT EXPERIENCE

Connect6 Strategy Research: Algorithm Optimization Based on Static Function Evaluation and Threat Space Search

Leader

Nov.2023

- Optimize the representation of the game board, path evaluation, and trend judgment to find the optimal strategy to improve the winning rate of the connect6 game;
- Employing the "path" concept to construct an evaluative function for deducing the current scenario, and implementing the alpha-beta pruning algorithm to curtail the number of nodes evaluated in the minmax algorithm, significantly enhancing program efficiency;
- Implementing the DTSS() function and iterative algorithm to instantiate the double-threat search approach, find the optimal solution after considering all possibilities to avoid ineffective moves;
- Gradually understand the implementation and methods of similar programs such as AlphaGo during the project promotion, deepening the application of core algorithms such as two-stage Monte Carlo Tree Search and Threat Space Search.

The construction of the Ocean University of China Mental Health Cloud Platform

Leader

Sept.2023 – Jan.2024

- Utilizing the AI impression generation feature innovatively, integration has been established with the large model of ERNIE Bot and Stable Diffusion for information connectivity, while conducting full-stack development for both the front-end and back-end of the website, to establish a professional psychological service platform;
- Adopting a B/S architecture as the foundational model, concomitantly embracing J2EE backend standards, with Tomcat serving as the container, and leveraging a myriad of technologies, supported by MySQL database services and Docker application containers to actualize operational functionalities;
- The fully-fledged platform delivers precise and efficient services to multiple users, substantially advancing the cause of mental health education among students.

Generation Model for Reconstructing HDR Images from LDR Images and DRDB Enhancement

Leader

Apr.2024 – Jun.2024

- Investigated the problem of reconstructing high dynamic range (HDR) images from low dynamic range (LDR) images, incorporating the use of Dilated Residual Dense Blocks (DRDB) to enhance the reconstruction process.;
- Leveraged the DRDB module to extract the most salient information from LDR images by employing deeper networks and larger receptive fields, and improved the HDR image generation model through spatial alignment modules to effectively reduce noise and mitigate image ghosting;

- Enhanced programming skills through the development of the model and gained a deeper understanding of the latest advancements in the field by writing research papers and collecting relevant literature.

EXTRACURRICULAR EXPERIENCE

OUC AI Education and Learning Public Welfare Association: Artificial Intelligence Knowledge Competition and Python Teaching

Qingdao, Shandong

Participant

Sept. 2021 – Jun. 2022

- Organized and planned offline artificial intelligence knowledge competitions, and conducted Python classes for local elementary school students;
- Led elementary school students to explore the world of programming while solidifying professional knowledge.

OUC and Qingdao Stanford Research Institute: "Food Allerg Detection Technology Equipment" Technology Transfer Project

Qingdao, Shandong

Team Member

Sept. 2022 – May. 2023

- Leveraged the platform of the university and research institute to study innovative courses such as market analysis and intellectual property law;
- Collected market information, prepared research reports, and ultimately communicated with local companies based on market conditions to sign contracts.

INTERNSHIP

Qingdao Mythichangtu Information Technology Co., Ltd. Intern

Embedded Development

Qingdao, Shandong

Oct.2024 – Dec.2024

Completed the development of stm32 motor, which can be controlled by mobile phone Bluetooth and infrared remote control.

- In terms of troubleshooting capabilities, various programming problems such as memory leaks, array boundary overruns, and logic errors have been solved through real work.
- In terms of single-chip microcontroller development, I learned the standard library functions of the STM32 and understood how to configure GPIOs, interrupts, timers, ADCs and other peripherals. Build a simple circuit directly into the physical layer construction, and learned how to read the principles and PCB layout.
- In the development of the data link layer protocol, we implemented a simple communication protocol to ensure reliable data transmission between single-chip microcontrollers.
- In the realization of serial communication protocols, we implemented UART's transceiver capabilities through programming and successfully exchanged data with computers. I learned the SPI protocol and used it to drive external devices such as EEPROM memory.
- In OLED screen development, I learned how to use modeling software to extract data from images, Korean, English and numbers and display this data on OLED screens. We have implemented the ability to dynamically refresh screen content by writing driving code.
- In the development and application of time slice task scheduling tables, we designed a simple operating system that allows you to schedule multiple tasks according to priorities and time slices.
- In the development of motor drive and the learning of PWM principles, code was written to control the speed and direction of the motor, adjusting the duty cycle of the PWM wave to precisely control the motor speed.

SKILLS, ACTIVITIES & INTERESTS

Languages: Fluent in English, Japanese, Spanish, Korean; Native in Chinese

Technical Skills: C;C++; Java; Python; Matlab; Proficient in mini-program and backend development

Interests: Vocal music; Guzheng; Piano; Street dance