Guanjie Chen

GitHub

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TECHNICAL SKILLS

Languages	:	python/cython, matlab, c/c++, java,c sharp
Tools	:	pytorch, Git, cmake ,Altium Designer, Linux System

EDUCATION

Xi'an Jiaotong University   Faculty of Electronic and Information Engineering
Bachelor of Automation   *Sep 2019 – Jul 2023*
GPA: 84.68/100 toefl:93

EXPERIENCE

Robot Core Developer   Oct 2021 – Aug 2022
The 10th National College Mechanical Innovation Competition

- Design main control board based on esp32-s3 chip and develop its drivers to control up to 18 Actuators
- Convert MATLAB's CPG program to C++ code and deploy it to the embedded device
- Develop a desktop control program using Qt for wireless control of the robot.
- Use MediaPipe and OpenCV to process visual information for target tracking and motion recognition

Hardware Designer   Aug 2021 – Jul 2022
The 21st ABU Robocon

- Design a new control board based on stm32f405rgt chip with its firmware
- Migrate the development environment to cubemx
- Build a new toolchain for stm32 project using GCC rather than Armcc

Architect of Embedded System Design   Sep 2020 – Aug 2021
The 20th ABU Robocon

- Develop a robotic task scheduling problem-based on UC/OS
- Use DMA and queue to optimize the serial communication
- Create a desktop control program using c sharp
- Construct a visual system that processes information from binocular cameras to Track target.

PROJECT

- Use **cython** to speed up python code
- Customize tensor operators in C++ and built python module
- Manage and schedule GPUs clusters with **OpenPAI**
- Deploy **NNI** for automated machine learning parameter tuning

AWARDS

- The 10th National College Mechanical Innovation Competition **National First Prize**
- The 21st ABU Robocon **National Second Prize**
- The 20th ABU Robocon **National Third Prize**
- The 20th ABU Robocon Quadruped robot equestrian competition **National runner-up**
- The Academic Elite Program Scholarship