Lyu Wenzhuang

Year 2, Computer Science, HKU

6 Sassoon Road, Hong Kong • +852 84031310 • u3612800@connect.hku.hk • My Webpage

EDUCATION

The University of Hong Kong

Sept. 2023 - Present

Bachelor of Engineering, majoring in Computer Science

GPA: 3.81/4.3

RELEVANT COURSEWORK

CS: Object-oriented Programming: A; Data Structures and Algorithms: A; Programming technologies (c++): A; Computer Programming I (python): A; etc.

MATH: Calculus and ordinary differential equations: A+; Discrete Mathematics: A; Multivariable Calculus and Linear Algebra: A+; etc.

KEY SKILLS

Languages: English: Fluent - IELTS 8.5 (speaking 8.5); Mandarin: Native **Main Programming Languages:** Python \approx C/C++ > Java \approx Haskell

Full Stack Developing: HTML, CSS, JavaScripts(JQuery, ReactJS, NodeJS), MySQL/MongoDB, PHP

Packages: Pytorch, Scikit-learn, ROS1/ROS2, Colmap

OS: Ubuntu, RHEL, Windows **Software:** Docker, Podman

EXPERIENCE

C++ Game Design Jan. 2024 – May. 2024

• Applied Object-Oriented Programming, focusing on robust class design and modular architecture.

• Consistently meeting tight deadlines while achieving full marks in all project evaluations

Java Web Game Design

Sept. 2024 – Dec. 2024

• Used Java GUI to display a chessboard, menu and game status. Used socket programming to connect clients to the server.

Radar Station Group Leader

Oct. 2023 – May. 2025

HKU Robomaster&Astar, Hong Kong

Robomaster & Astar plays in a national robotics competition hosted by DJI.

- Developed a target recognition system that integrated a Livox radar and a binocular camera. Used Deep Learning to detect
 moving enemy robots. Used PnP algorithm to estimate 3D pose of the cameras. Used Kalman Filter and DeepSORT to fast
 track the robots.
- · Implemented preprocessing acceleration utilizing TensorRT and CUDA, improving inference speed.
- Designed a robust communication system based on ROS and serial protocols.

Achievements

o Empowered the team to win the first prize in the international group.

RH199 Red Hat Certified System Administrator Rapid Track Course

Aug. 2024 - Sep. 2024

- Learned to use Docker, and Podman to manage images and containers
- Successfully earned the RHCSA certification.

Winter Research Assistant in Infobodied Lab

Dec. 2024 - Feb. 2025

- Used Orbbec Depth Camera to collect and process color, depth and imu data. Used multithreading in c++ to design the camera driver to grab and render the images with low latency.
- Used Colmap to reconstruct scenes, people and interacted objects and track their 6D pose

Personal Webpage Design (here)

Feb. 2025 - Present

• Integrated HTML, CSS animation to showcase my profile in a decent way.

Rendering Pipeline Simulator

Jan. 2025 - Present

• Used c++ to simulate shading, texture, ray tracing and rendered objects.