

Shi Boao

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EDUCATION

The University of Hong Kong Sept. 2022 - Present
Bachelor of Engineering, major in Computer Science, minor in Math GPA: 4.12/4.3 **Rank: 2/140+**
University of Illinois Urbana-Champaign (Semester exchange) 2025 Spring
The Grainger College of Engineering
Hangzhou No.2 High School of Zhejiang Province Sept. 2019 - June. 2022

RELEVANT COURSEWORK

CS: Computer Graphics: A+; Operating System: A+; Object-oriented Programming: A+; Data Structures and Algorithms: A+; Quantum Information and Computation: A+; etc.
MATH: Real Analysis: A; Optimization: A; Multivariable Calculus: A; Linear Algebra A+; Probability & Statistics: A+; Calculus and Ordinary Differential Equations: A+; etc.

SKILLS

Communication Languages: English: Fluent - TOEFL **104** (speaking 24); 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, ROS1/ROS2, IsaacGym, Colmap
Software: Docker, Blender, MeshLab
Hardware: Orbbec femto RGBD camera, industry camera, Intel NUC

PUBLICATIONS

EvoR: Evolving Retrieval for Code Generation
Hongjin Su, Shuyang Jiang, Yuhang Lai, Haoyuan Wu, Boao Shi, Che Liu, Qian Liu, Tao Yu
Accepted as The 2024 Conference on Empirical Methods in Natural Language Processing (EMNLP2024), Findings

INTERNSHIP

Research Intern in Infobodied Lab | *Robotics, Computer Vision, Computer Graphics* May. 2024 – Now

- Supervised by [Yanchao Yang](#), about embodied AI. I am leading a research project about fullbody humanoid scene/object interaction(HSI/HOI) generation
- Build up an automatic whole body human motion data collection pipeline, which extract demonstration data from real video and reconstruct real scenes into their digital twins; reconstruct interacted objects and track their 6D pose; collecting over 100 hours HSI/HOI dataset
- Using deep learning to train a text-driven scene-conditioned human motion generation model

Research Assistant in XLang Lab | *LLM agent, information retrieval* Dec. 2023 – Mar. 2024

- Supervised by [Tao Yu](#). Built a benchmark to test information retrieval model reasoning ability
- Curated long-tail programming Languages dataset, testing LLM generalization ability with retrieval argumented generation
- Outputted a research paper "EvoR: Evolving Retrieval for Code Generation"

PROJECTS

Robot auto-aiming system | *Robotics, Computer Vision, Control Theory, Sensors* May. 2023 – Apr. 2024

- Use deep learning to detect enemy robots. Use PnP algorithm to estimate 6D pose of target armor, use Extended Kalman Filter to model target motion status
- Use ROS package for inter-nodes communication and robot control

EXPERIENCE & TEACHING

HKU RoboMaster Team Sept. 2022 - Apr. 2023

Leader of computer vision group, develop first generation of robot auto-aiming system

Won Eighth-ranked team in both 3V3 and Infantry Match in DJI RoboMaster University League

HKU ENGG1330 (programming I) | *Teaching Assistant* Sept. 2023 – Dec. 2023

2-hours tutorial every week

HKU COMP2396 (Object-oriented Programming) | *Teaching Assistant* Sept. 2024 – Dec. 2024

2-hours tutorial questions answering

COMPETITON AWARDS

Huawei Coding Challenge at ICPC Aisa Final March 2023

Rank: 25/311

2022 International Collegiate Programming Contest Asia East Continent Final Contest March 2023

Bronze Medal

2022 International Collegiate Programming Contest Hong Kong Regional Contest Jan. 2023

Rank: 19, Silver Medal

National Olympiad in Informatics in Provinces(NOIP) (Zhejiang Province) 2018 - 2020

First Prize × 3 times

SCHOLARSHIP & AWARDS

Hong Kong University Alumni Prize Oct. 2024

One awardee in Faculty of Engineering, The University of Hong Kong

Talent Development Scholarship June. 2024

HK\$10,000, awarded by The Hong Kong Government

Dean's Honours List Mar. 2024

Top 10% Engineering students, The University of Hong Kong

Young Tsun Dart Scholarship Nov.2023

HK\$15,000, two awardees in Faculty of Engineering, The University of Hong Kong

China Soong Ching-ling Foundation Zhiyuan Scholarship 2022-2026

¥80,000 annually for undergraduate study, ≈ 20 awardees nation-wide