Xihe Zhao

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EDUCATION

McMaster University Hamilton, ON

Master of Engineering in Systems and Technology

09/2024 - Present

· GPA: 4.0/4.0

Relevant courses: Deep Learning, Software Design Tools Methods, Advanced Robotics & Automation

Henan Normal University

Henan, China

Bachelor of Science in Computer Science and Technology

09/2020 - 06/2024

• GPA: 4.0/5.0

INTERNSHIP

Beijing Qingcang Technology Co., LTD

Beijing, China

Intern, Research and Development Department

07/2023-08/2023

 Assisted in collecting requirements, putting forward advice on business processes, developing core modules, such as video uploading, feature manager and delivery, and interface in the Feature Analysis and Test Environment Research of Deepfake and Authentication Data

Intern, Research and Development Department

07/2022-08/2022

- Participated in the research of the intelligent scene synthesis method based on big models
- · Designed the system frame based on requirements after discussions and developed the back-end function of the system

ACADEMIC EXPERIENCE

Development of "Randongli" Gym System

11/2023

- · Researched market feasibility and youth fitness needs
- · Designed system architecture and database schema with MySQL for data management
- Developed a responsive front-end using HTML, CSS, and JavaScript with features like putting forward food advice and notifications
- · Built a RESTful API with Node.js to handle database queries and user requests
- · Used Axios for asynchronous HTTP communication between front-end and back-end systems

Study on Image Steganography

03/2022 - 06/2022

- · Analyzed the current mainstream algorithms of image steganography based on deep learning
- Put forward the improvement methods of the current mainstream algorithms after consulting the literature related to deep learning and image steganography and learning the relevant online courses and the corresponding mathematical knowledge
- · Gained an in-depth understanding of image steganography and the world's mainstream image steganography algorithms

COMPETITIONS

2022 Group Programming Ladder Tournament of China University Computer Competition

05/2022

The Third Prize (provincial level) & National Successful Participation Award

- · Chose proper algorithms, such as Disjoint-set data structure, graph theory, dynamic programming, greedy algorithm, and Binary Indexed Trees, and wrote corresponding codes based on the given topic
- · Performed brainstorming with teammates for the best solutions

TEACHING EXPERIENCE

Teaching Assistant in the Computer Course

02/2023 - 06/2023

20h/Week

Taught primary students computer courses and promoted students' interest in computers by leading students to design
games with computer skills, teaching hardware and software knowledge on makecode and micro:bit and Microcontroller
Unit, and introducing Processing to students for their better understanding of basic knowledge of python

SKILLS

Languages: JAVA, Python, C/C++, HTML/CSS, JavaScript, SQL, XML, YAML, JSON

Frameworks/Technologies: Spring, SpringBoot, Mybatis, MybatisPlus, Maven, Node.JS, AJAX, RESTful API