

ZIXIANG HU

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Education

University of Nottingham Ningbo China

Sept. 2019 – Jul. 2023

BSc (Hons) Computer Science with Artificial Intelligence

Ningbo, China

- **GPA:** 3.91/4.0 overall (WES Evaluated); Average: 82.7/100 overall (Top 5%, 2/59)
- **Core Courses:** Artificial Intelligence Methods, Mathematics for Computer Scientists, Operating Systems and concurrency.

Research & Projects

Human Re-identification (Final Year Project)

Sept. 2022 – Present

Research Assistant | Supervised by Dr. Qian Zhang

Computer vision, Human re-identification

- Improved the accuracy of ReID baseline model through training with GAN-generated data.
- Raised two constraints in filtering the GAN-generated images, which guarantees the generated images are helpful in later training.
- A first-authored paper targeting the Image Processing journal (IF 7.59) in progress.

Industrial Internet-based Digital Twin System for Safe Production

June. 2022 – Aug. 2022

Research Assistant | Supervised by Dr. Qian Zhang

Computer vision, Front-end development

- Based on Yolo5, trained a model for glove detection, which is later deployed in cooperating factories for danger detection.
- Developed the front-end interface of the central monitoring system base on Vue.js. The system will monitor a variety of scenarios and issue an alert if a hazard (workers' dangerous action) is detected.

Eth Shanghai Hackathon

May. 2022 – June. 2022

Team Member

Block Chain, Content-based Recommendation

- Crawled the latest 300,000 pieces of transaction records from the public chain, cleaned and organized the data before analyzing.
- Based on features like frequency of transaction and type of NFT held, users were projected into a high-dimensional feature space in order to calculate similarity. To an input user, the recommended users would be those data point close to the given data point.
- Built a website where the user can enter a public chain address, and then the system recommends five users who may be interested in him.

Vision-Based Project Management System for Home Decoration Companies

Sept. 2021 – June. 2022

Team Leader

WeChat Applet Development

- Analyzed the current market of house decorating and concluded that no existing mature software allowed house owners to be engaged in decorating process and get timely feedback from the construction site.
- Developed a vision-based WeChat applet that fully engaged the house owner in the house decoration process, such as checking images from the site and knowing the next process and the overall schedule.

Faculty Reception Enquiry Support Heuristics

June. 2021 – Sept. 2021

Research Assistant | Supervised by Dr. Chris Roadknight

NLP, BERT

- Relieved the reception pressure of the faculty office by applying the BERT model to categorize input inquiry and offer the pre-determined answer for that category of questions.
- Analyzed the strength and weaknesses of two algorithms: BERT and word bag, and figured out when to use which algorithm.

Experience

Ningbo Jinlin Technology Co., Ltd. (Start-up)

Jan. 2022 – Mar. 2022

Full-stack Software Engineer Intern

Ningbo, China

- Led the development of the front-end of a mini-app in WeChat that serves as the edge device controller. Built the bilingual UI interface and reusable components based on WXML.
- Led the back-end development and designed the API and structure of the database; all functions and databases are deployed on the WeChat cloud. Together with teammates responsible for hardware, we achieved communication between mobile phones and edge devices through Bluetooth.

University Livestreaming Eating Competition in East China

May. 2020 – Apr. 2022

Leading Organizer

- Led team members to write the activity plan. Acted as the host and controlled the overall competition process.
- Invited seven famous streamers (1,000,000 fans in total) in the Bilibili as judges, with 14 teams participating.
- The winning video got 50,000+ views in the Bilibili in one week, and our activity tweet reached 7000+ views.

Technical Skills

Languages: Python, Java, JavaScript (TypeScript), SQL, Shell, HTML/CSS, C(C++), Haskell, YAML

Frameworks/Technologies: PyTorch, TensorFlow, React.js, Vue.js, MongoDB, Postman, Git, Linux, Latex

Awards & Honors

Zhejiang Provincial Government Scholarship (Top 4 out of 160), 2021 & 2022

Dean's Scholarship (Top 10%) 2021 & 2022

GRE & TOEFL: 325 (V155, Q170), 110 (L30, R29, W28, S23)