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EDUCATION

University of New South Wales

Sydney, Australia

Master of information technology WAM: 81.8

Feb. 2023 – Sep. 2024

Core Courses: Principles of Programming (DN), Data Structures (HD), Database Systems (HD), Artificial Intelligence (DN), Computer Networks (HD), Software Construction (HD)

Jiangsu University of Technology

Jiangsu, China

Bachelor of Internet of things

Sep. 2018 – Jun. 2022

Core Courses: Digital/Analog circuits, Mobile application development, Short-distance wireless technology, Embedded software development, Microprocessor Application, etc.

TECHNICAL SKILLS

Languages: Python, C/C++, SQL, JavaScript, HTML/CSS, Typescript, Shell, PHP, Cypher

Frameworks: React, Vue, Node.js, Flask, WordPress, Material-UI, FastAPI, QT, WebAssembly, OpenCV, Selenium

Developer Tools: Git, Docker, CI/CD, Google Cloud Platform

EXPERIENCE

Algorithm and software Engineer

Dec. 2021 – Jun. 2022

Youzhi Automation Technology · Internship

Jiangsu, China

- Developing industrial vision software with C++ and QT
- Implementing and optimizing the vision algorithms and improving the interactivity of software

SELECTED PROJECTS

Kùzu-Wasm [Link] | C++, Javascript, React, Webassembly, Apache Arrow, Cypher

Feb. 2024 – Present

- First public Graph Database powered by WebAssembly
- Developed during the research program at the UNSW under the supervision of Dr. Zhengyi Yang
- Designed to provide fast server-less analytical processing for the graphs on the Web
- Features: Extremely fast, Highly Scalable, Serverless, Embeddable, Cypher Support

Industrial Vision Processing Program [Link] | C++, Qt, OpenCV, PCL

Dec. 2021 – Jun. 2022

- Developed a machine vision software named AIV with C++, which was used in industrial product quality testing
- Using OpenCV to accomplish 2D/3D features including template matching, line/circle/plane finding, etc.
- Implemented UI functions including step-by-step execution, scripting, debugging, 2D/3D effect preview, etc.

Campus Guide Program [Link] | PHP, Python, MySQL, React

Jul. 2018 – Present

- Built a WeChat program with React which provides campus guide including encyclopedia, news, personal class schedule, and learning materials for all staff and students
- Implemented Restful API interface with Laravel framework and used Python to collect course information
- The program has been maintained since 2018, and the number of users is over 10,000

PUBLICATIONS

Pine Script v5 User Manual Chinese Version: Script Manual for TradingView, published on Feb. 2022 on GitHub [Github] [Online Book]

Kùzu-Wasm: High-performance In-browser Graph Analysis: Under the supervision of Dr. Zhengyi Yang and published on Aug. 2024 during the research program at UNSW [Link]

AWARDS

“iGeek Home” WeChat Applet Contest: Third award

Oct. 2019

“Bule Bridge Cup” Algorithm Contest: Second prize of province

April 2021

LANGUAGES

English and Mandarin Chinese