

Research Assistant (Full Stack Development)

<u>Job Highlights</u>

- Job Title: Research Assistant (Full Stack Development)
- Work Hours: Full Time (40 hours/week) in Hong Kong
- Job Duration: 6 Months
- Expected Start Date: Mar 2024
- Monthly Salary: HKD 20,000 30,000 (around RMB 18,000 28,000)
- Work Location: The Hong Kong University of Science and Technology

Job Summary

We are looking for a research assistant for a research project that develops a digital twin-based platform to support environmental monitoring in property and facility management industries. The hired research assistant will be in charge of prototype development. He/She will work closely with a research team to develop end-to-end technical solutions. We are looking for someone who has strong first-hand technical expertise in a variety of web development, network engineering and cloud platforms. He/She should be comfortable working in an agile environment and be passionate about continuous improvement and test-driven development.

Job Description

- Development of digital twin-based applications for environmental monitoring.
- Configuration and Integration of web-based platform with IoT, robotics, AI and building systems.
- Work with the research team to develop prototypes and finished products, mainly design, front-end, back-end and data interface development as well as network configuration
- Provide documentation for configuration/use/testing/maintenance of the developed platform as needed

Job Requirements:

- Have experience in product design, frontend and backend development, including technical/language knowledge, such as React/ Redux/ Express/JavaScript/NodeJS/ HTML/CSS/REST API/PostgreSQL/Redis, etc. Experience in TypeScript/ThreeJS/ NextJS (App Router) is an advantage.
- Have basic knowledge of network connection, data integration techniques and their applications. Experience in WebSocket is an advantage.
- Have basic knowledge of containerization, version control, local and cloud deployment technologies and their applications. Experience in multi-tenant/SaaS/microservices experience is an advantage.
- Able to use English for communication and documentation. Able to speak in Cantonese for communication is an advantage.

*Interested parties should send their full resume and work portfolio (if any) to both of the following emails. Personal data will be used for recruitment purposes only.

- Prof. Jack C.P. CHENG <u>cejcheng@ust.hk</u>
- Dr. Helen H.L. KWOK <u>hlkwokab@connect.ust.hk</u>

About Us

The HKUST BIM Lab has conducted cutting-edge academic and applied research in many emerging scientific and technological fields, including BIM, IoT, artificial intelligence, computer vision, virtual reality/augmented reality, facility management, laser scanning, construction robotics, and blockchain. It has organized several events related to BIM and digital construction for academia and the industry. It also promotes and supports education in BIM and construction digitalization. The HKUST BIM Lab is led by Professor Jack Cheng, the Associate Head and Professor of the Department of Civil and Environmental Engineering at HKUST. He is currently the chairperson of the Committee on BIM and Construction Digitalisation and a council member of the Construction Industry Council (CIC). More detailed profiles of Prof. Cheng are available at http://www.ce.ust.hk/people/jack-chin-pang-cheng-zhengzhanpeng.