THE HONG KONG POLYTECHNIC UNIVERSITY

DEPARTMENT OF COMPUTING

Post Specification

Full-time or Part-time Research Assistant/Associate (several posts)
[Appointment period: 3 months to 12 months initially, with possibility of further appointment]

The appointee will assist the project leader in the project of "Edge-Cloud collaborative real-time railway monitoring platform". He/she will be required to

(a) develop a digital twin platform for railway monitoring system based on edge-cloud collaboration. We already have a primary digital system running on a cloud server and we want to further reduce the latency in data processing using edge computing. We also want to visualize the computation results in edge devices with the digital twin platform in the cloud server;

(b) help migrate ML-based data processing algorithms to edge devices (Nvidia Jetson Xavier NX) for real-time data analytics;

(c) help optimize the user interface for the railway monitoring system based on our exiting user interface;

(d) prepare the project documents and system usage documents;

(e) perform any other duties as assigned by the Project Leader or his delegates.

Qualifications

Applicants should have:

(a) a degree in Computer Science, Communication Engineering, Internet of Things, Smart Manufacturing or other related fields;

(b) skillful hands-on experience in digital twin related software and frameworks, such as Gazebo, FlexSim, Ansys Twin Builder, Autodesk Forge, and Unity;

(c) familiar with programming in HTML, Java, Python, SQL, etc;

(d) familiar with edge devices (Nvidia Jetson Xavier NX);

(e) a good command of English; and

(f) good communication and interpersonal skills.

Preference will be given to those with research and/or project development experience.

Applicants are invited to contact
Prof. Jiannong Cao : Tel no. 2766 7275, Email jiannong.cao@polyu.edu.hk
OR
Mr. Qianyi Chen: Email 19074424r@connect.polyu.hk, Wechat cqy186cqy
for further information.

Remuneration

A highly competitive remuneration package will be offered. Applicants should state their current and expected salary in the application.

Feb. 2023