

Centre for Advances in Reliability and Safety Limited (CAiRS), initiated by The Hong Kong Polytechnic University, is established in 2020 with its operation located in the Hong Kong Science Park, New Territories, Hong Kong. The mission of CAiRS is to bridge academic and industrial counterparts to introduce and implement artificial intelligence methods and prognostic techniques to advance reliability and safety. The goal of the Centre is to improve reliability and safety of critical components and devices, products, systems and sub-systems designed, commissioned and/or manufactured by Hong Kong companies and enterprises. More information about the company can be found at <http://www.cairs.hk>.

(1) Postdoctoral Fellow (Ref. No.: CAiRS-R23/P5.2 - Integrity of Sensor Data)
[Appointment period: each for thirty-six months]

(2) Research Associate (Ref. No.: CAiRS-R24/P5.2 - Integrity of Sensor Data)
[Appointment period: each for thirty-six months]

Duties

The appointees will assist the Project Leader and Programme Manager in the development of innovative methods for ensuring the reliability of sensors and the integrity of data produced by sensors using the machine learning techniques.

The **Postdoctoral Fellow** appointee will be required to:

- a) convert/conceptualize industrial pain point/motivation to a good structure AI research;
- b) team up with a group of researchers with specific expertise to set the research directions;
- c) coordinate, disseminate, and communicate internally and externally the research plan;
- d) drive to reach the reliability and safety objectives;
- e) prepare and publish relevant research papers in high-tier peer-reviewed journals; and
- f) perform any other duties as assigned by the Centre Director or his delegates.

The **Research Associate** appointee will be required to:

- a) plan industrial pain point/motivation to a good structure AI research;
- b) team up with a group of researchers with specific expertise to implement the research work and experiment;
- c) drive to reach the reliability and safety objectives within scheduled timeline;
- d) report project work issues and support devising of project proposal and report; and
- e) perform any other duties as assigned by the Centre Director or his delegates.

Qualifications

Applicants for the post of **Postdoctoral Fellow** should have a doctoral degree in Data Science, Electronic Engineering, Information Engineering, Computer Science, or an equivalent qualification

in a related field. They should also have a strong analytical skill with experience in big data and artificial intelligence research.

Applicants for the post of **Research Associate** should have a master's degree in Data Science, Electronic Engineering, Information Engineering, Computer Science, or a related field. They should have a good analytical skill with interests in big data and artificial intelligence research.

For both posts, applicants should also have:

- (a) possessing research experience and interest on sensor application usage and the corresponding data integrity issue;
- (b) proficiency in programming language (e.g. C, Python, Matlab);
- (c) good interpersonal and communication skills; and
- (d) good command of written and spoken English.

Fresh graduates are also welcome.

Preference will be given to the candidates who have experience in electronic system development.

Applicants are invited to contact Dr Daniel Lun at enpkun@polyu.edu.hk for further information.

Remuneration

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

Application

Please send a completed application form, together with a detailed curriculum vitae via email to careers@cairs.hk

Feb 2022

Deadline for application: Recruitment will continue until the positions are filled.