

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-R19/P5.3 - Data visualization and modeling for processes, products and systems)

**[Appointment period: each for thirty-six months]**

**(2) Research Associate** (Ref. No.: CAiRS- R20/P5.3 - Data visualization and modeling for processes, products and systems)

**[Appointment period: each for thirty-six months]**

### **Duties**

The appointees will assist the Project leaders and Programme Manager in the development of innovative methods for representation of multi-dimensional data and images, in order to facilitate interpretation, modeling, expert checking of validity, and educational use.

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, Computer Science, Engineering, Mathematics or an equivalent qualification in a related field. They should also have a strong analytical skill with interests in big data and artificial intelligence.

Applicants for the post of **Research Associate** should have a master's degree in Data Science, Computing Science, Engineering, Mathematics or a related field.

For both posts, applicants should also have:

- (a) proficiency in programming language (e.g. C, Python, Matlab);
- (b) good interpersonal and communication skills; and
- (c) good command of written and spoken English.

Fresh graduates are also welcome.

Preference will be given to those with research experience in machine learning and data science.

Applicants are invited to contact Dr. Haibo Hu at [haibo.hu@polyu.edu.hk](mailto:haibo.hu@polyu.edu.hk) or Prof. Francis Lau at [francis-cm.lau@polyu.edu.hk](mailto:francis-cm.lau@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](mailto:careers@cairs.hk)

Feb 2022

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