CENTRE FOR ADVANCES IN RELIABILITY AND SAFETY LIMITED

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-R7/P2.1 - Transfer learning for adaptive diagnostics and simulation-based analysis)
Postdoctoral Fellow (Ref. No.: CAiRS-R7/P2.2 - Ensemble methods for individualized fault diagnosis)
[Appointment period: each for thirty-six months]

(2) Research Associate (Ref. No.: CAiRS- R8/P2.1 - Transfer learning for adaptive diagnostics and simulation-based analysis)
Research Associate (Ref. No.: CAiRS- R8/P2.2 - Ensemble methods for individualized fault diagnosis)
[Appointment period: each for thirty-six months]

Duties

The appointees will assist the Project Leaders and Programme Manager in the development of a systematic methodology for effective fault diagnosis and/or predictive maintenance. It is expected that the projects will focus on applications in transportation or power utilities maintenance.

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

a) conduct studies of related literature and applied research;

b) supervise junior researchers to conduct studies of related literature and applied research;

c) report research progress and results regularly to project team;

d) write and publish articles in high-tier peer-reviewed journals; and

e) perform any other duties as assigned by the Centre Director or his delegates.

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

a) conduct studies of related literature and applied research;

b) report research progress and results regularly to project team;

c) support writing and publishing articles in high-tier peer-reviewed journals; and

f) 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 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 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 Prof. Edward Chung / Dr Siqi Bu at edward.cs.chung@polyu.edu.hk / siqi.bu@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 position is filled.