COCHE Job Advertisement for Senior Engineer/ Engineer (Electronic, optical, and software development)

**About the Research Centre**

In collaboration with the CityU, the University of Oxford, and the Karolinska Institutet, the Hong Kong Centre for Cerebro-cardiovascular Health Engineering (COCHE) was established with the support of the ITC-InnoHK Programme to develop new ways to tackle cardiovascular disease (CVD), which is the world’s leading cause of morbidity and mortality. To address the most pressing health challenges caused by CVD, COCHE focuses on developing innovative technologies such as flexible and wearable devices, biomedical and molecular imaging, nano-biosensing, micro-robotics, healthcare AI systems, and other groundbreaking methods to enable early prevention, diagnosis, and intervention of the disease. These technologies can reduce human costs while alleviating the healthcare system's financial and social burdens. Please visit <https://www.hkcoche.org/> for more information about COCHE.

**Senior Engineer/ Engineer (electronic, optical, computing and software developments**) **(Fresh Graduates are also welcome)**

**Responsibilities:**

* Conduct research and development for image sensing, data processing, and analysis
* Work on prototype development, laboratory testing, and field support for at least one of the following areas/projects:-
  + Implement and establish innovative technologies for early detection and prevention of cardiovascular diseases and stroke
  + Develop wearable sensors, flexible devices and mHealth technologies for the prediction and monitoring of CVDs
  + Develop image-guided nano/micro robotic system and close-loop drug delivery devices for CVD therapists.
  + Participate in research projects to develop human intelligence and AI-based models for early warning system to predict cardiovascular diseases/stroke
  + Design biosensing modules for biomarker detection
  + Develop 3D ultrasound imaging, OCT, MRI vascular imaging, PA imaging, molecular imaging, physiological imaging, and multi-modal imaging methods
  + Advanced microscopy and image processing and improve functions of cell separation, paring and manipulation

**Requirements:**

* Bachelor Degree in Computer Science, Biomedical Engineering, Electronic Engineering, Mechanical Engineering or relevant disciplines with a minimum of 3 years of related experience. Candidates with less experience will be considered as Engineers.
* Strong programming skills in C/C++, Python, Matlab, etc.
* Previous experience in any of the areas including wearable devices, flexible sensing, biomedical signal processing, optical imaging, physiological imaging, MRI, multimodal imaging, nano-micro robotics, ultrasound and/or photo-acoustic imaging, drug delivery devices, computational fluid dynamics, cardiovascular modeling, AI and mobile health is highly desirable.
* Good command of both written/spoken English and Chinese (including Putonghua), with excellent organizational, interpersonal, and communication skills.

**Remuneration & Duration of Appointment:**

The remuneration package will be highly competitive, and commensurate with qualifications and experience. Fringe benefits for full-time appointments include paid leave, medical insurance, contribution to MPF, etc. The incumbent will normally work a five-day week. The position offer is subject to the applicant’s experience and academic qualification. Initial appointments will be made on a fixed-term contract of up to 1-3 years commencing immediately. Re-appointment thereafter will be subject to performance and mutual agreements.

**Application Closing Date:**

The position offer is subject to the applicant’s experience and academic qualification. The application will be open until the position is filled. Only short-listed candidates will be notified.

**Application Procedures:**

Please send your detailed resume with a cover letter, including your current and expected salary to [HR@hkcoche.org](mailto:HR@hkcoche.org)