A post-doctoral computing position is available at the University of Chinese Academy of Sciences (www.ucas.ac.cn). The successful candidate will be based at CERN, and work within the LHCb Core Software group.

The Core Software group in LHCb is responsible for development and maintenance of the C++ software frameworks on which the physics analysis applications are based, and for the complete software development, build, test, and distribution infrastructure of the experiment, which is coded mainly in Python. Future challenges include adaptation and optimisation of the software to take maximum advantage the foreseen evolution of computer architectures and of compilers in the coming years.

Position Functions

As a software developer and full member of the LHCb team, his/her role will cover both software development and operational activities. He/She will be actively involved in all LHCb Core Software development discussions. His/Her development tasks will include, in the first instance, extensions to the functionality of the event simulation framework and its interfaces to the Gaudi event processing framework, and modernisation of the tools used to support the software development process. The candidate will also be expected to contribute to support activities of the group, such as user support for the software development tools and operational support for the software-testing infrastructure.

Experience and competencies

The experience and competencies required for this post include:
- Several years of proven programming experience with C++ and Python
- Expert knowledge of modern C++ (C++11 onwards)
- Experience with code repositories (at least one of SVN or Git)
- Experience with any of the following would be an advantage:
    - CMake
    - Static code analysis tools
    - Code profiling tools
    - Unit testing frameworks
    - Development of large software projects
- The main communication language of the team is English, with French and Italian also widely used. Proficiency in spoken English is mandatory.

Salary, start date, and working location

Initial appointment will be for two years, with possible renewal. The successful applicant will be expected to join at the earliest time and drive LHCb-China group's contributions to the LHCb software. He/She will be based at CERN in fulltime. The annual gross salary will be RMB 100,000–150,000 depending on qualification and experience. The post-holder will have an additional allowance of around CHF 3,000 during the stay at CERN. He/she also has opportunity to apply for extra allowance from CAS grants.

Application

The position will remain open until filled. Interested candidates should send a CV and a brief motivation letter to Prof. Yangheng Zheng (zhengyh@ucas.ac.cn). He/She should also arrange for three letters of recommendation to be sent by the reference writers directly to the same address.