2018-00749 - Back-end developer for Software Heritage

Contract type: Public service fixed-term contract
Renewable contract: Oui
Level of qualifications required: Graduate degree or equivalent
Fonction: Temporary scientific engineer
Level of experience: From 3 to 5 years

Context
Software Heritage is an ambitious nonprofit, entirely Free/Open Source Software (FOSS) project that aims at collecting, organizing, preserving for the very long term, and sharing all publicly available software in source code form, together with the corresponding complete development history (e.g., from a Version Control System) where available. The Software Heritage archive already contains about 5 billion unique source code files and 900 million commits, retrieved from more than 80 million software projects.

Assignment
We are looking for an experienced back-end developer to grow our development team, and work on:
- extending the coverage of the Software Heritage archive, and
- implement back-ends for user facing features that allow to access and exploit the content of the archive.

Main activities
- development of ingestion modules for Software Heritage
- development of features on Software Heritage archive

Skills
Working knowledge of one or more of the following techniques and technologies would be a plus and might be used as a basis to tailor the profile to your specific interests (to be negotiated):
- UNIX system programming
- Functional programming
- Machine learning

A successful candidate will have strong programming skills, fluency in at least a couple of system- and/or application-level programming languages, as well as a solid track record of contributions to existing FOSS projects and communities.

All the code developed as part of this position will be released under a FOSS license, usually copyleft (GPL3 or AGPL3). Upstream contributions to FOSS products we depend upon are strongly encouraged.

Benefits package
- Subsidised catering service
- Partially-reimbursed public transport
- Social security
- Paid leave
- Flexible working hours
- Sports facilities

General Information
- Town/city: Paris
- Inria Center: Siège
- Starting date: 2018-06-01
- Duration of contract: 2 years
- Deadline to apply: 2018-06-03

Contacts
- Inria Team: DGD-T (DGD-T)
- Recruiter: Di_cosmo Roberto / roberto_di_cosmo@inria.fr

The keys to success
As part of this position you will primarily work on retrieval, storage, and analysis of source code development artefacts at a very large scale. To that end, the ideal candidate should be familiar with one or more of the following technologies:
- Python
- PostgreSQL
- Ceph
- Apache Kafka
- Various version control systems and their internals (Git, Subversion, Mercurial, etc.)
- Various source package formats and their internals (Debian’s .dsc, Red Hat’s SRPM, sourceful JARs, etc.)
- Various development forges and package managers, as well as their APIs (GitHub, GitLab, Bitbucket, NPM, PyPi, etc.)

About Inria
Inria, the French National Institute for computer science and applied mathematics, promotes "scientific excellence for technology transfer and society". Graduates from the world's top universities, Inria's 2,700 employees rise to the challenges of digital sciences. With its open, agile model, Inria is able to explore original approaches with its partners in industry and academia and provide an efficient response to the multidisciplinary and application challenges of the digital transformation. Inria is the source of many innovations that add value and create jobs.

Conditions for application
Defence Security:
This position is likely to be situated in a restricted area (ZRR), as defined in Decree No. 2011-1425 relating to the protection of national scientific and technical potential (PPST). Authorisation to enter an area is granted by the director of the unit, following a
Favourable Ministerial decision, as defined in the decree of 3 July 2012 relating to the PPST. An unfavourable Ministerial decision in respect of a position situated in a ZRR would result in the cancellation of the appointment.

**Recruitment Policy:**
As part of its diversity policy, all Inria positions are accessible to people with disabilities.

**Warning:** you must enter your e-mail address in order to save your application to Inria. Applications must be submitted online on the Inria website. Processing of applications sent from other channels is not guaranteed.