Offer #2024-07596

Ingénieur développement logiciel spécialiste en applications web

The offer description below is in French

Contract type: Fixed-term contract

Level of qualifications required: Graduate degree or equivalent

Other valued qualifications: ec

Fonction: Temporary scientific engineer

Level of experience: From 3 to 5 years

Context

This engineering position is open within the ALMAnaCH project team at the Inria Paris Center. ALMAnaCH is a research team of about fifty members, including 7 permanent members, specializing in natural language processing (NLP) and digital humanities (processing historical and literary sources through computing). It is one of the 230 project teams at Inria, the national institute for research in computer science and control, a public research institution comprising 9 research centers, including the Paris Center to which ALMAnaCH belongs.

The position is part of both the European project ATRIUM (https://atrium-research.eu), aimed at developing research infrastructures at the European level, and the eScriptorium project (https://ephenum.hypotheses.org/1412; https://gitlab.com/scripta/escriptorium/), which aims to provide a web application for automatic handwriting recognition, involving North American and European teams.

This work is in line with Inria's expertise in processing humanities sources through digital means (digital humanities), particularly in the recognition of handwritten or printed text, with efforts involving the production of research software or reference datasets (https://htr-united.github.io/).

The person taking this position will therefore be in constant contact not only with colleagues internally (Ph.D. students, engineers, researchers) but also at the national (EPHE, University of Tours, CNRS, etc.) and international level (in Europe through the ATRIUM project, in the United States for eScriptorium). The engineer will participate in weekly video conferences about the eScriptorium tool (United States & France) and in ATRIUM meetings (monthly/quarterly). Annual travel to ATRIUM meetings (Europe) should be considered. Presenting development results at national or international conferences is possible and advised.

The engineer will also collaborate with the Service of Experimentation and Development (SED), permanent engineers whose mission is to support, animate, and coordinate technological developments by providing expertise and advice to the research work of the Inria Paris center.

Remuneration

Based on qualifications and experience, in accordance with the Public Service pay scales. Starting from €2,765 gross per month (estimated net before taxes at €2,222).

Assignment

Missions:

- Main mission (about 90% of the time): development of the backend of eScriptorium (open-source).
- Collective missions: participation in the life of the team and projects, including for conferences or international meetings abroad.

Main activities

Engineering

- Development of eScriptorium's backend (using Python [Django], PostgreSQL, Docker Compose): eScriptorium GitLab
  - Improving software scalability: Handling asynchronous tasks for training or inference of deep learning models.
- **Enhancing infrastructure features**: For example, developing an export API to connect with other software, particularly through modules like oAuth.
- **Improving the application monitoring ecosystem**: Crash detection on instances.
- **Improving application maintainability** by enhancing continuous integration control:
  - Development of unit and integration tests.
- **Integrating minor changes in the UI** that reflect options added in the backend (new form fields involving HTML or JS, using the existing framework).
- **Enhancing the HTR-United ecosystem** (a full JavaScript catalog).

**Coordination**
- Managing code reviews in collaboration with international partners.

**Collaborations and System Management**
- **Managing updates on the Inria project instance** (more information: Alix's PhD blog)
- Participating in the life of the team and the ATRIUM project.

**Skills**

**Technical Skills and Required Level:**
- Web programming expertise
- Desired skills in test development and continuous integration
- Strong knowledge in software development:
  - Proficiency in Python and Django
  - Expertise in debugging
  - Knowledge of software architecture and programming paradigms, software engineering, best practices, and software development tools (version control, documentation, compiling, continuous integration and deployment, distribution, etc.).
  - Front-end skills (JavaScript / HTML / CSS) are a plus.

**Languages:**
- Proficiency in English (knowledge of additional languages is a plus)

**Additional Appreciated Skills or Interests:**
- Interest in managing long asynchronous tasks
- Interest in machine learning technologies
- Potential interest in the humanities (history, literature, etc.)

**Benefits package**
- Restauration subventionnée
- Transports publics remboursés partiellement
- Congés: 7 semaines de congés annuels + 10 jours de RTT (base temps plein) + possibilité d’autorisations d’absence exceptionnelle (ex: enfants malades, déménagement)
- Possibilité de télétravail
- Aménagement du temps de travail (après 12 mois d’ancienneté)
- Équipements professionnels à disposition (visioconférence, prêts de matériels informatiques, etc.)
- Prestations sociales, culturelles et sportives (Association de gestion des œuvres sociales d’Inria)
- Accès à la formation professionnelle
- Sécurité sociale

**Remuneration**

Selon profil et expérience du candidat.

**General Information**
- **Theme/Domain**: Language, Speech and Audio Web development (BAP E)
- **Town/city**: Paris
- **Inria Center**: Centre Inria de Paris
- **Starting date**: 2024-09-01
- **Duration of contract**: 2 years
- **Deadline to apply**: 2024-06-30

**Contacts**
- **Inria Team**: ALMANACH
- **Recruiter**: Clerice Thibault / thibault.clerice@inria.fr

**About Inria**
Inria is the French national research institute dedicated to digital science and technology. It employs 2,600 people. Its 200 agile project teams, generally run jointly with academic partners, include more than 3,500 scientists and engineers working to meet the challenges of digital technology, often at the interface with other disciplines. The Institute also employs numerous talents in over forty different professions. 900 research support staff contribute to the preparation and development of scientific and entrepreneurial projects that have a worldwide impact.

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.

Instruction to apply

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.