Offer #2025-08744

Python software engineer for skrub within the projet P16

Contract type : Fixed-term contract

Renewable contract : Yes

Level of qualifications required : PhD or equivalent

Fonction : Support functions

Corps d'accueil : Ingénieur de Recherche (IR)

Level of experience : From 3 to 5 years

Context

Since 2018, Inria has played a crucial role as a support for the State's action in the field of artificial intelligence, in close collaboration with the National Strategy for AI. To steer this mission, Inria has created the AI Program, which is part of the Program Agency set-up entrusted by the State to Inria, and which coordinates innovative cross-functional AI initiatives: research, transfer and support for public policies.

As part of the AI acceleration strategy, and in particular in the area of “developing cutting-edge digital infrastructures, stimulating public-private partnerships and increasing the impact of AI research”, Inria has proposed the implementation of an acceleration project to support the implementation and development of an open and interoperable sovereign platform of AI software libraries for French companies, and its scaling to the European level.

This initiative is one of Inria's priorities as part of the development of its AI acceleration strategy, and with the aim of contributing to French technological

sovereignty and the economic impact on French industry.

The expected impact of these measures on French industry is to enable all French companies, as well as public and institutional players, to accelerate their digital transformation using AI, without being in a captive relationship with the dominant players, thanks to the availability of a generic technological base and a set of associated transfer mechanisms.

This project, named P16, has two main components:

- A private-sector component aimed at industrializing the software in relation to the industrial and economic ecosystem, disseminating it in this world and ensuring, through the development of products and services, the economic sustainability of the project after the initial funded phase.
- A component aimed at the academic AI community, to facilitate and accelerate the industrialization of research results for industry, and to widely disseminate P16's achievements to the academic world.

As part of its academic program, the AI Program is recruiting a skrub library development engineer for Project P16, starting on June 1, 2025.

Designed to handle complex data stored in one or more dataframes, skrub helps perform wrangling operations needed to produce a table ready for use in a machine learning model. skrub provides essential building blocks for preprocessing and feature engineering for tabular machine learning.

Main activities

Development of skrub:

- Design, develop and maintain skrub library features using robust software development practices.
- Participate in the experimentation of state-of-the-art statistical learning algorithms on unstructured data.
- Optimize code performance and quality by exploring different implementations.
- Document library code and APIs.

Development planning and phasing

- Participate in task planning, organization of sprints, etc.
- Define delivery milestones and ensure they are met.

Collaborate with cross-functional teams:

- Collaborate with other technical teams within the P16 project to ensure seamless integration of skrub with other software components.
- Participate in coordination and planning meetings with related teams to align development goals and efforts.

Skills

- Solid experience in Python, with excellent knowledge of libraries such as scikit-learn, pandas, numpy, matplotlib and scipy.
- Advanced skills in data manipulation and statistical analysis, with a thorough understanding of learning methods.
- Demonstrated ability to work collaboratively on research and software development.
- Strong knowledge of software engineering practices, including version control, testing and continuous integration.
- Excellent communication skills, enabling effective collaboration with internal and external teams.

Benefits package

Subsidized meals

Public transport partially reimbursed

Vacations: 7 weeks' annual leave + 10 days' RTT (full-time basis) + possibility of exceptional leave (e.g. sick children, moving house)

Possibility of teleworking and flexible working hours

Professional equipment available (videoconferencing, loan of computer equipment, etc.)

Remuneration

Selon le barème statutaire de la fonction publique, les diplômes et le niveau d'expérience.

General Information

- **Town/city :** Saclay
- **Inria Center :** Siège
- **Starting date :** 2025-06-01
- **Duration of contract :** 2 years
- **Deadline to apply :** 2025-04-17

Contacts

- **Inria Team :** ADPnum (ADPnum)
- **Recruiter :**
  Kraidache Khallihanna / khallihanna.kraidache@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.

The keys to success

- Engineering degree in computer science, applied mathematics, numerical methods, statistical learning or related field.
- Relevant experience in similar projects, preferably in the context of artificial intelligence and data research.

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

CV + Lettre de motivation.

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.