Applied Computational Social Sciences - PSL Institute

https://acss-dig.psl.eu/en/candidate

PSL University is hiring
1 senior data-scientist (research engineer) for social sciences

In the context of the development of the ACSS institute, PSL university is hiring one junior and one senior data-scientists. They will be responsible for implementing strategies, tools and methods for producing and analyzing data from various sources (Web, institutional databases, archives, etc.). They will also be responsible for ensuring compliance with best practices in matter of code and data management. Finally, they will contribute to the development of statistical analysis or machine learning algorithms (particularly in the field of natural language processing).

Created by the University Paris Sciences and Letters (PSL) and hosted by Paris-Dauphine, the «Applied Computational Social Sciences» Institute aims to strengthen research on major societal issues (political and social cohesion, ecological transition, digital transformation, economic efficiency and competitiveness) by linking data sciences and social sciences.

The Institute collects and processes heterogeneous data on a large scale both to enable scientific advances and to help inform public dialog and decision-making.
It brings together a multidisciplinary team of researchers in scocial sciences and relies on a team of engineers in data science who bring their expertise to build original databases and perform sophisticated analysis. These projects are initiated and supported by research units affiliated to the French National Institute for Research (CNRS) and a group of outstanding research universities. The outcomes of the Institute activities are also featured to reach policymaking and business audiences.

Application:

The application form is available at this address: https://acss-dig.psl.eu/en/candidate. It should include a CV, a cover letter, and a transcript of concluded university degrees. Review of applications will begin **July 2nd, 2024** and continue until the positions are closed. Starting date: September or October 1st, 2024.
Contact : Bruno Chaves Ferreira bruno.chavesferreira@dauphine.psl.eu

Required Training and Skills:

Requested Skills:

- Hands-on experience in developing deep neural networks and other advanced static models applied to automated language processing on large corpora.
- Mastery of Python and R ecosystems dedicated to data science.
- More specifically in Python, mastery of numpy, pandas, spacy and pytorch.
- In R, proficiency in tidyverse, tidymodels and associated libraries, and torch.
- Proficiency in relational databases.
- Understanding of scientific methods in the humanities and social sciences.

Additional Skills:

- Experienced in tuning hyperparameters for large language models (LLMs) to improve performance and efficiency.
- Familiar with fine-tuning models such as BERT, GPT, and Transformer-based architectures
- Knowledgeable in distributed training techniques and leveraging GPUs in a cluster.
- Practice of modern web services (REST architecture, JSON formats, XML, etc.).
- Development methodologies: unit tests, version control (GIT).

Education:

A minimum of a Master's degree in an AI/ML related field and at least 3 years of relevant experience required or a PhD degree in the field.

Miscellaneous:

This is a new position on a fixed term contract for a period of 1 year, renewable. Remuneration according to profile and experience (in accordance with the CNRS's guidelines)
The position is based at the University of Paris Dauphine.