

## Post-doc position opening

### Deep Learning for corporate data

#### EconomiX, UMR 7235 CNRS university Paris Nanterre

**Applications are invited for 1 Post-doc positions available in the period 2020-2021.**

The position is a 1-year position funded by CNRS in the form of a Postdoc Fellowship and focuses on research and development of state-of-the-art Machine Learning and Data Analytics methodologies targeting corporate data. The selected candidate will be employed by the CNRS and will have an office at the university Paris Nanterre.

The position is available from September 15<sup>th</sup> 2020 or as soon as possible hereafter.

#### Job description

The Postdoc Fellow will be affiliated with the Small Business Assessment Tool (SBAT) project of EconomiX, a CNRS research institute. Your responsibilities will be to use your business administration knowledge and data science skills to analyse large datasets containing qualitative information about companies. Analysis will consist in determining assess any company. The objective is to determine a small firm typology and to assess the situation of any company compared to a control group made up of similar companies.

The mission will be supervised by Prof. Nadine Levratto and François Delbot, Assistant professor. The SBAT project currently consists of 3 senior permanent scientific staff members (two at the university Paris Nanterre, one at the university of Sherbrooke, Canada). It will be completed with one Postdoc and and two Master degree intern. The SBAT team will contribute with an extensive research environment within firm analysis and evaluation techniques in general.

#### Education and profile

Applicants should hold:

- a PhD degree in Computer Engineering, Computer Science, in Business administration oriented towards data sciences or similar;
- a solid background in Machine Learning, with focus on Deep Learning and/or Statistical Machine Learning methodologies (Decision trees, CART and variants; Support Vector Machines; Importance of variables; etc.)
- skills in statistics for economics (Classification and discrimination methods, Bayesian networks, Markov fields, Pattern detection)
- experience in programming using Python or Matlab and related scientific libraries / toolboxes;
- the ability to work with experts from a broad range of scientific and technology backgrounds;
- strong communication and collaboration skills

The working language is French but candidates are required to be proficient in English.

## **Who we are**

EconomiX is a research centre in economics located at the University of Paris Nanterre and the CNRS (National Centre for Scientific Research). With about 200 members, including around 60 PhD students, EconomiX is one of the four major research and training research centres in economics in Ile-de-France.

Research activities at EconomiX are structured around three complementary axes:

- Sustainable Development, Environment and Public Policy
- Law, Institutions, Regulation and Strategic Interactions
- International Macroeconomics, Banking and Financial Econometrics

EconomiX undertakes its research and co-operative relationships by developing partnerships with other French, European and international academic institutions, public authorities, and businesses.

## **Place of Work and area of employment**

The formal place of employment is university Paris Nanterre located at 20 minutes by suburban train from the centre of Paris.

## **Application procedure**

The application must be in English and include a curriculum vitae, degree certificates, a complete list of publications, a statement of future research plans and information about research activities, and verified information on previous experience (if any). Interested candidates should send these documents by email to Prof. Nadine LEVRATTO: [nadine.levratto@parisnanterre.fr](mailto:nadine.levratto@parisnanterre.fr)

Shortlisting is used. This means that after the deadline for applications – and with the assistance from the assessment committee member – the head of project selects the candidates to be evaluated. After evaluation of their application, selected candidates are invited for an interview. All applicants will be notified by email no later than September 1, 2020. No expertise will be provided.

## **Formalities and salary range**

Appointment shall be in accordance with the collective labour agreement in the CNRS. Salary depends on seniority.

All interested candidates are encouraged to apply, regardless of their personal background. Research activities will be evaluated in relation to actual research time. Thus, we encourage applicants to specify periods of leave without research activities, in order to be able to subtract these periods from the span of the scientific career during the evaluation of scientific productivity.

## **Deadline**

All applications must be received by: 20.07.2020