

Postdoc in Machine learning applied to brain activity data

Ecole/Institution/Société:

KTH Royal Institute of Technology, Sweden / Stockholm

Discipline:

Machine Learning

Type d'emploi::

Full-time

Date de publication:

2021-10-15

Personne à contacter:

If you wish to apply for this position, please specify that you saw it on AKATECH.tech

JOB DESCRIPTION

KTH Royal Institute of Technology in Stockholm has grown to become one of Europe's leading technical and engineering universities, as well as a key center of intellectual talent and innovation. We are Sweden's largest technical research and learning institution and home to students, researchers and faculty from around the world. Our research and education covers a wide area including natural sciences and all branches of engineering, as well as architecture, industrial management, urban planning, history and philosophy.

Job description

dBRAIN is an interdisciplinary initiative to better understand neurodegenerative diseases such as Parkinson's disease and Alzheimer's disease. We combine brain imaging, machine learning, topological data analysis and computational modeling of biological neural networks at multiple scales to identify causal links among disease biomarkers and disease symptoms. This understanding should improve diagnosis, prediction of the disease progression and suggest better therapies. More information about dBRAIN <https://www.digitalfutures.kth.se/research/current-research-projects/dbrain/>

The project will entail analysis of neural data. We are currently analyzing data from Parkinson's patients (eye-tracking, MEG) and extracting features to be used for disease diagnostics and prediction. The candidate will work in close collaboration with other postdocs and PIs in the consortium.

What we offer

- A position at a leading technical university that generates knowledge and skills for a sustainable future.
- Engaged and ambitious colleagues along with a creative, international and dynamic working environment.
- Works in Stockholm, in close proximity to nature
- Help to relocate and be settled in Sweden and at KTH
- An interdisciplinary working environment where candidates will have an opportunity to develop new complementary skills.
- An opportunity to work on a project that has a genuine chance to influence clinical practices and improve quality of life of patients.

- A large community of neuroscientists, mathematicians, computational modelers and machine learning experts to network with.

Requirements

- A doctoral degree or an equivalent foreign degree, obtained within the last three years prior to the application deadline (With some exceptions for special reasons such as periods of sick or parental leave, kindly indicate if such reason exists in your resume).
- We are looking for candidates with a PhD in any of the following disciplines: Machine Learning, Computational Neuroscience, Computer Science, Physics or similar.
- Previous experience in machine learning analysis of data is essential.
- Ability to collaborate and communicate with the members of the consortium is essential.

Preferred qualifications

Knowledge and skills that are meritorious for the position:

- Research expertise
- Teaching abilities
- Awareness of diversity and equal opportunity issues, with specific focus on gender equality
- Collaborative abilities
- Independence
- Previous experience in dynamic modeling of neural activity is desirable

The preferred candidates should also have demonstrated expertise (through publications) in any one of the following

- Expertise in analysis of multi-dimensional and multi-scale temporal data eg neural activity or neuronal protein data
- Dynamic modeling of biophysically and morphologically detailed neurons and synapses

Application

Log into KTH's recruitment system in order to apply to this position. You are the main responsible to ensure that your application is complete according to the ad.

The application must include:

- CV including relevant professional experience and knowledge.
- Copy of diplomas.
- Brief summary of previous work. (Max 2 A4 pages in legible font size).
- A statement of why you are interested in and suitable for this position (Max 2 A4 pages in legible font size).
- Contact details of two academic referees.
- Information of when you would be able to start the employment.
- Your complete application must be received at KTH no later than the last day of application, midnight CET / CEST (Central European Time / Central European Summer Time).

About the employment

The position offered is for, at the most, two years.

A position as a postdoctoral fellow is a time-limited qualified appointment focusing mainly on research, intended as a first career step after a dissertation.

Others

Striving towards gender equality, diversity and equal conditions is both a question of quality for KTH and a given part of our values.

For information about processing of personal data in the recruitment process please read [here](#).

We firmly decline all contact with staffing and recruitment agencies and job ad salespersons.

Disclaimer: In case of discrepancy between the Swedish original and the English translation of the job announcement, the Swedish version takes precedence

Contract type: Full time

First day of employment: According to agreement

Salary: Monthly salary

Number of positions: 1

Working hours: 100%

City: Stockholm

County: Stockholms län

Country: Sweden

Reference number: J-2021-2273

Contact :

- Erik Fransén, Professor, erikf@kth.se
- Natasha Kapama, HR, kapama@kth.se

Personne à contacter:

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