



Offre n°2023-06821

Post-Doctoral Research Visit F/M Personalized patient follow-up

Type de contrat : Fixed-term contract

Niveau de diplôme exigé : PhD or equivalent

Autre diplôme apprécié : PhD degree

Fonction : Post-Doctoral Research Visit

Niveau d'expérience souhaité : Recently graduated

A propos du centre ou de la direction fonctionnelle

The Inria University of Lille centre, created in 2008, employs 360 people including 305 scientists in 15 research teams. Recognised for its strong involvement in the socio-economic development of the Hauts-De-France region, the Inria University of Lille centre pursues a close relationship with large companies and SMEs. By promoting synergies between researchers and industrialists, Inria participates in the transfer of skills and expertise in digital technologies and provides access to the best European and international research for the benefit of innovation and companies, particularly in the region.

For more than 10 years, the Inria University of Lille centre has been located at the heart of Lille's university and scientific ecosystem, as well as at the heart of Frenchtech, with a technology showroom based on Avenue de Bretagne in Lille, on the EuraTechnologies site of economic excellence dedicated to information and communication technologies (ICT).

Contexte et atouts du poste

The recruitee will join the [BIP-UP project](#).

This project is based on a collaboration between Scool and a medical team at Inserm/CHU de Lille that have been active for 5 years now.

The scientific goal of this collaboration is to investigate the exploitation of data to improve patient follow-up after surgery. We model this problem as a sequential decision making under uncertainty problem.

This collaboration has already produced interesting results, in the form of a website, presentations in conference, and publications in top machine learning conferences, and top medicine journals.

This collaboration involves about 10 people: data engineer, PhD student, post-doc, researchers, professors.

Mission confiée

The recruitee will work in close relation with both teams, Scool and the Inserm team.

With Scool, the goal is to explore how the problem at hand can be modeled, most likely as a contextual bandit problem, propose algorithms, study their theoretical properties.

With the Inserm team, the goal is to investigate the application of this work to the real practical case.

These two lines of work are intrinsically strongly tied to each others.

Principales activités

The main activities are those of a post-doc:

- finding and studying the related litterature
- proposing ideas to address the problem at hand
- investigating these ideas on both fronts: theoretically, and from the application point of view.
- present the work to the members of the project and work with them to go further
- write papers to be submitted to top conference in ML/AI, and in top journals in medicine
- present the work in international scientific events
- animate the collaboration

Compétences

A strong background in machine learning, in particular in bandit theory, is especially required.

Skills in practical aspects of statistics/data science are necessary, the more elaborate the better.

Scientific communication skills (speaking, writing).

Avantages

- Subsidized meals
- Partial reimbursement of public transport costs
- Leave: 7 weeks of annual leave + 10 extra days off due to RTT (statutory reduction in working hours) + possibility of exceptional leave (sick children, moving home, etc.)
- Possibility of teleworking and flexible organization of working hours
- Professional equipment available (videoconferencing, loan of computer equipment, etc.)
- Social, cultural and sports events and activities
- Access to vocational training
- Social security coverage

Informations générales

- **Thème/Domaine** : Optimization, machine learning and statistical methods Statistics (Big data) (BAP E)
- **Ville** : Villeneuve d'Ascq
- **Centre Inria** : [Centre Inria de l'Université de Lille](#)
- **Date de prise de fonction souhaitée** : 2025-01-01
- **Durée de contrat** : 2 years
- **Date limite pour postuler** : 2025-06-30

Contacts

- **Équipe Inria** : [SCOOL](#)
- **Recruteur** :
Preux Philippe / Philippe.Preux@inria.fr

A propos d'Inria

Inria est l'institut national de recherche dédié aux sciences et technologies du numérique. Il emploie 2600 personnes. Ses 215 équipes-projets agiles, en général communes avec des partenaires académiques, impliquent plus de 3900 scientifiques pour relever les défis du numérique, souvent à l'interface d'autres disciplines. L'institut fait appel à de nombreux talents dans plus d'une quarantaine de métiers différents. 900 personnels d'appui à la recherche et à l'innovation contribuent à faire émerger et grandir des projets scientifiques ou entrepreneuriaux qui impactent le monde. Inria travaille avec de nombreuses entreprises et a accompagné la création de plus de 200 start-up. L'institut s'efforce ainsi de répondre aux enjeux de la transformation numérique de la science, de la société et de l'économie.

L'essentiel pour réussir

Passion for research.

Strong working abilities.

Strong interest in the collaboration between theory of machine learning and its practical application.

Ability to easily interact with the people involved in the project.

Be able to propose original and pointfull ideas, and defend them.

Attention: Les candidatures doivent être déposées en ligne sur le site Inria. Le traitement des candidatures adressées par d'autres canaux n'est pas garanti.

Consignes pour postuler

Sécurité défense :

Ce poste est susceptible d'être affecté dans une zone à régime restrictif (ZRR), telle que définie dans le décret n°2011-1425 relatif à la protection du potentiel scientifique et technique de la nation (PPST). L'autorisation d'accès à une zone est délivrée par le chef d'établissement, après avis ministériel favorable, tel que défini dans l'arrêté du 03 juillet 2012, relatif à la PPST. Un avis ministériel défavorable pour un poste affecté dans une ZRR aurait pour conséquence l'annulation du recrutement.

Politique de recrutement :

Dans le cadre de sa politique diversité, tous les postes Inria sont accessibles aux

personnes en situation de handicap.