Inria

Offre n°2024-08193

Chronic inflammatory diseases endotyping Researcher (M/F)

Le descriptif de l'offre ci-dessous est en Anglais

Type de contrat : CDD

Niveau de diplôme exigé : Thèse ou équivalent

Fonction : Chercheur contractuel

Niveau d'expérience souhaité : De 3 à 5 ans

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 position will take place in a pluridisciplinary team composed of mathematicians, data scientists, clinicians; a unique multidisciplinary environment focused on developing novel computational tools for **chronic inflammatory diseases (CID) to better understand them and the applied treatments** The person to be recruited will benefit from a secured access to large local hospital repository composed of multi-omics data, to additional large European databases and to the required computing resources. The proximity with top level medical researchers in the domain will allow for a fine exploration of this mass of clinical data.

This job offers unique possibilities in a rich collaborative context including a world-wide recognised research team in precision medicine supported by Inria, Inserm and Lille university hospital centre.
It also allows a unique access to large bank of medical data.

The person to be recruited with work in collaboration with Pr. Vincent Sobanski, from CHU and INSERM.

Mission confiée

The goal of this position is to develop innovative methods to characterize endotypes of chronic inflammatory diseases (CID) based on the integrative analysis of patients combining clinical and follow-up data (highly heterogeneous information) and multi-omics profiles (high-dimensional information). This will allow to improve the CID nosology.

Principales activités

Main activities:

- Review of the literature
- Benchmark of existing methods
- Development of novel supervised and non supervised clustering algorithms for multiomic data
- Interactions with the biological and clinical partners
- Supervision of data scientists (research engineers, phd students and postdoctoral fellows)
- Test and validation

Additional activities:

- Continuous integration / continuous deployment of the code
- Data visualization

- Statistical reporting to the partners

Compétences

Technical skills and level required :

- Strong background in statistics and machine learning
- Hands-on experience with real-world medical data analysis
- Experience in computer vision is a plus
- Strong motivation for medical and societal applications of computational methods
- Knowledge of biology and/or medicine is a plus
- Ability to work both independently and as a team, good relational skills
- Excellent programming skills in a scripting language (R and/or Python)

Additional:

- English speaking
- Academic writing skills
- Oral presentation skills

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

Rémunération

According to the profile

Informations générales

- **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 ans
- **Date limite pour postuler :** 2024-12-07

Contacts

- **Équipe Inria :** INRIA
- **Recruteur :**
  Mitton Nathalie / Nathalie.Mitton@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

We are looking for a canidate that owns a PhD in computer science, who is creative in proposing solutions and capable of critical analysis of results. We demand the applicant:

1. to be curious and interested in new technologies
2. to have appetence for medical world
3. to have a background in IoT and statistics and machine learning
4. to be fluent in spoken and written English with strong communication and presentation skills
5. Experience with hands-on experience with real-world medical data analysis

Attention: Les candidatures doivent être déposées en ligne sur le site Inria. Le traitement des

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.