Offer #2025-08751

Ingénieur scientifique contractuel / Statistiques (Big data) / Vision, perception et interprétation multimedia

The offer description below is in French

Level of qualifications required : Graduate degree or equivalent

Fonction : Temporary scientific engineer

Level of experience : Recently graduated

Context

Recent advances in large language models, exemplified by DeepSeek-R1, demonstrate that reinforcement learning (RL) can encourage complex reasoning capabilities transferable across diverse textual domains. This proposal explores the potential to extend such reasoning skills to vision-language models (VLMs), which currently excel in descriptive tasks but lack robust reasoning capabilities. By leveraging the domain-agnostic reasoning patterns observed in DeepSeek-R1, this research aims to investigate whether these capabilities can enhance visual reasoning, offering an efficient path to advancing multimodal models.

Assignment

Missions :
La personne recrutée sera amenée à developper des algorithmes d'apprentissage pour des large-language models.

Pour une meilleure connaissance du sujet de recherche proposé : Recent advances in large language models, exemplified by DeepSeek-R1, demonstrate that

reinforcement learning (RL) can encourage complex reasoning capabilities transferable across diverse textual domains. This project explores the potential to extend such reasoning skills to vision-language models (VLMs), which currently excel in descriptive tasks but lack robust reasoning capabilities. By leveraging the domain-agnostic reasoning patterns observed in DeepSeek-R1, this research aims to investigate whether these capabilities can enhance visual reasoning, offering an efficient path to advancing multimodal models.

Responsabilités :
La personne recrutée a la charge du developpement et de l'evaluation de ces algorithms.

Main activities

- Proposer des solutions pour l'entrainement des large-language models
- Rédiger les rapports
- Tester, modifier ces modeles jusqu'à validation

Skills

Compétences techniques et niveau requis : expert en machine learning

Langues : anglais

Benefits package

- Restauration subventionnée
- Transports publics remboursés partiellement
- Congés: 7 semaines de congés annuels + 10 jours de RTT (base temps plein) + possibilité d'autorisations d'absence exceptionnelle (ex : enfants malades, déménagement)
- Possibilité de télétravail et aménagement du temps de travail
- Équipements professionnels à disposition (visioconférence, prêts de matériels informatiques, etc.)
- Prestations sociales, culturelles et sportives (Association de gestion des œuvres sociales d'Inria)
- Accès à la formation professionnelle
- Sécurité sociale

General Information

- **Theme/Domain :** Vision, perception and multimedia interpretation
  Statistics (Big data) (BAP E)
- **Town/city :** Paris
- **Inria Center :** Centre Inria de Paris
- **Starting date :** 2025-05-01
- **Duration of contract :** 3 months
- **Deadline to apply :** 2025-04-25

Contacts

- **Inria Team :** WILLOW
- **Recruiter :**
  Schmid Cordelia / cordelia.schmid@inria.fr

About Inria

Inria is the French national research institute dedicated to digital science and technology. It employs 2,600 people. Its 200 agile project teams, generally run jointly with academic partners, include more than 3,500 scientists and engineers working to meet the challenges of digital technology, often at the interface with other disciplines. The Institute also employs numerous talents in over forty different professions. 900 research support staff contribute to the preparation and development of scientific and entrepreneurial projects that have a worldwide impact.

The keys to success

Des competences en vision par ordinateur, machine learning et programmation (python ou C) sont souhaitee.

> **Warning** : you must enter your e-mail address in order to save your application to Inria. Applications must be submitted online on the Inria website. Processing of applications sent from other channels is not guaranteed.

Instruction to apply

Defence Security :
This position is likely to be situated in a restricted area (ZRR), as defined in Decree No. 2011-1425 relating to the protection of national scientific and technical potential (PPST).Authorisation to enter an area is granted by the director of the unit, following a favourable Ministerial decision, as defined in the decree of 3 July 2012 relating to the PPST. An unfavourable Ministerial decision in respect of a position situated in a ZRR would result in the cancellation of the appointment.

Recruitment Policy :
As part of its diversity policy, all Inria positions are accessible to people with disabilities.