

Fiche de poste

Intitulé du poste : Postdoctoral researcher or Engineer to develop and integrate advanced language models into robots.

Type de poste : ☒ Post-Doc ☒ Ingénieur-e ☐ Autre : ...

Date de début de contrat : 1^{er} Décembre 2025

Durée du contrat : 1 an, avec possibilité de prolongation jusqu'à 2 ans.

Quotité de travail : ☒ 100% ☐ autre précisez (50 % minimum) :

Expérience souhaitée :

- ☐ Débutant
☒ 1 - 4
☐ 4 - 10
☐ + de 10

Niveau d'études souhaité : Doctorat (post-doc) ou Master/école d'ingénieurs (ingénieur).

Montant rémunération : La rémunération sera conforme à la grille salariale en vigueur à l'université, selon le statut (post-doctorant ou ingénieur).

Laboratoire d'accueil : ISIR (*Institut des Systèmes Intelligents et de Robotique*), Campus Pierre et Marie Curie, 4 place Jussieu, 75005 Paris.

Personne à contacter

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Candidature :

- ☐ En ligne. Lien vers le portail emploi :
☒ Par mail. Envoyer votre candidature par mail, avec [**LogiE-IA**] en objet, un CV et une lettre de motivation.

Date limite de dépôt de la candidature : 15 Octobre 2025

Job description (in English)

Context:

The LOGIE AI project aims to revolutionize logistics robotics through generative artificial intelligence. Coordinated by Enchanted Tools in collaboration with Hugging Face, NXP, and INRIA, and supported by ISIR (Sorbonne University), the project embraces an open-source approach to develop and integrate advanced language models into robots.

By embedding large language models (LLMs) and vision-language models (VLMs) into robotic systems, the project seeks to enable robots to understand, interpret, and respond to commands in a context-aware and precise manner. This integration will improve the efficiency of operations in complex environments such as logistics and human-robot interaction.

Sous la co-tutelle de :

Missions:

The recruited candidate (post-doc or engineer) will contribute to one or several of the following tasks:

- **Data collection and processing:** designing and executing protocols to capture motion, interaction, and manipulation data, including simulation-based augmentation.
- **Modeling and optimization:** adapting and optimizing LLMs/VLMs for robotic applications, with a focus on real-time interaction, robustness, and efficiency.
- **Embedded and hybrid solutions:** deploying models on NXP processors and GPU clusters, evaluating hybrid local/cloud execution pipelines, and optimizing for energy efficiency.
- **Validation and integration:** running experiments on robotic platforms (e.g., Mirokai, Franka, Tiago, ...) in both controlled and logistics-like environments.
- **Contribution to open-source development:** supporting collaborative development with project partners and the research community.

Post-doctoral researcher: expected to contribute to novel research directions, scientific publications, and supervision of junior students and interns.

Engineer: expected to contribute to system implementation, integration, experimental validation, and technical support.

Required profile:

- PhD in Robotics, Artificial Intelligence, Computer Science, or related field (required for post-doc).
- Master's degree or engineering degree in Robotics, AI, Computer Science, or related disciplines (sufficient for the engineer position).
- Strong interest in AI for robotics, particularly in areas such as LLMs, VLMs, human-robot interaction, or robotic manipulation.
- Ability to work in a collaborative, interdisciplinary, and open-source environment.

Required skills:

- Proficiency in Python and common deep learning frameworks (e.g., PyTorch, TensorFlow).
- Experience with robotics middleware (ROS/ROS2) and robotic platforms.
- Knowledge in machine learning, natural language processing, or computer vision.
- Familiarity with embedded systems, GPU computing, or hybrid cloud/local architectures is a plus.
- Good communication skills in English (French is a plus, but not required).

This is a full-time position starting soon, based at ISIR, Sorbonne University, Paris. The selected candidate will join a vibrant research environment with access to advanced robotic platforms and international collaborations.