Researcher in Computer Vision and Deep Learning
Smart data generation and annotation,
semi-supervised learning for visual recognition

ORGANISATION

Based in Saclay (Essonne), the List Institute is one of the three technological research institutes of CEA Tech, the technological research department of CEA. Dedicated to smart digital systems, its mission is to carry out technological developments of excellence on behalf of industrial partners in order to create value.

Within the List Institute, the Computer Vision and Machine Learning for scene understanding carries out research in the field of computer vision and artificial intelligence for the perception of intelligent and autonomous systems. The laboratory's research topics are visual recognition, behavior and activity analysis, large-scale automatic annotation and perception and decision models. These technologies find their application in major sectors of activity (safety, mobility, advanced manufacturing, health).

LOCATION

CEA Centre de Nano-Innov - plateau de Saclay (91)

CONTRACT

18 to 36 months contract
Salary depending on education and experience level

RESPONSBILITIES

As part of a structuring research project of the institute, in partnership with a major industrial partners (Valeo, Thales, Airbus, Safran, Renault, Air Liquide…), you will have the mission to conduct research on new AI technologies for the automated generation and annotation of visual data, the improvement of visual recognition models with unlabelled data.
More precisely, under the responsibility of a project manager, you will be responsible for:

- Contributing to the scientific and technical reflection necessary for the realisation of the project;
- Carrying out scientific and technological watch;
- Proposing, designing and developing new machine learning approaches applied the smart generation of labeled data and semi-supervised learning of recognition models ;
- Evaluating and validating the performance of the developed methods;
- Implementing the algorithms and integrating them as modules in the software framework of the projet ;
- Participating to the scientific dissemination of the developed methods.

CANDIDATE PROFILE

- PhD or engineer with significant research experience in the field of vision and artificial intelligence
- Skills in image processing and computer vision, machine learning, in particular deep learning
- Programming : Python, C++, Deep Learning frameworks (Tensorflow, PyTorch)

Your qualities are creativity, a taste for challenge, autonomy and a sense of teamwork. You welcome the project to join an ambitious institute in the heart of the dynamic environment of the Saclay plateau.

If you recognize yourself in these skills, please send your CV + cover letter to
quoc-cuong.pham@cea.fr