

Assistant Professor in Computer Science – Machine learning & Dataviz

The ESILV Engineering School (<http://www.esilv.fr>) located at Paris La Défense is hiring a permanent Associate Researcher. He/She will participate to ESILV's courses and research activities of the DVRC laboratory (<https://www.devinci.fr/research-center/le-laboratoire/>).

Teaching

The candidate will be implied in the organization and will teach in the Faculty of Computer Science Department.

The school offers master's degrees in the following fields: computer science, AI, cybersecurity, finance, industry 4.0, health & biotech, energy. The candidate will be invited to participate in the different masters.

He/She will increase and reinforce the skills at the faculty and will contribute to the five years of the engineering school, especially in:

- Master cycle of the faculty:
 - Machine learning
 - DataViz
 - AI
 - Data processing & management

All other Computer Science domains in order to develop students' knowledge in data management are welcomed. The candidate will also tutor students for internships, apprentices and projects.

Teaching keywords: *python, dataviz, neural networks*

Research

The candidate will be a member of the Digital Group of the laboratory "De Vinci Research Center" (DVRC). This research group is composed of 14 permanent researchers whose goal is to analyze and model the digital world with multidisciplinary projects. The digital group search to reinforce the research focus on Data Science, especially in Data Management.

We want to strengthen the Machine Learning's dynamic of the team. The recruitment of a researcher with a long experience in the Machine Learning field will allow us to make the work in this field long-lasting.

The team is currently working on two main themes in Machine Learning:

- 1) *Smart Industry* with the design of new numerical tools allowing the collection, structuring and analysis of data, based on advanced Machine Learning and Deep Learning techniques, such as Reinforcement Learning, DTW or CNN. The goal is to allow the safeguarding of expertise with digital twins and their redeployment in the company.
- 2) From *Big Data* to *Smart Data* to collect, store, analyze, optimize and present more and more data. We design solutions that take advantage of the latest advances in knowledge representation, particularly on Deep-Q Network, Reinforcement Learning, Transfer Learning or Learning2Rank. We are particularly interested in tourism

applications with a link between spatiotemporal data analysis and tourism behavioral analysis.

The EC will be able to consolidate these themes into Machine Learning and structure the team's research dynamics in this field. The final choice will be dictated in the first place by the quality of the dossier and the integration project, including its openness to the outside world (national and international).

Research keywords: *Machine Learning, Reinforcement Learning, Transfer Learning, Deep-Q Network*

Profile

Doctor in computer science training, HDR strongly recommended, the candidate must witness a strong experience in higher education. The candidate will have, in accordance with the culture of the school and the laboratory, a joint mastery of the techniques and concepts of computer science and his or her field of expertise.

Application

Curriculum Vitae with detailed teaching activities (level, content, volume), scientific contributions (CORE rank, n° pages), research projects (theme, funding, academic and industrial relations), outreach (committees, awards), supervision (theses, M2) and letters of recommendation. A project of integration in the research and teaching teams is welcome.

Contact:

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