Provost's Office
Computer Science Department

Position: Tenure track Assistant Professor Position in Robust and efficient Deep Learning with applications to Large Language Models
Theme: Deep Learning and Large Language Models
Rate: full-time
Workload: 100%
Number of positions: 1
Application deadline: March 15th 2026
Start date: September 2026 (to be discussed)

About École polytechnique

École polytechnique, commonly known as l'X, is a world-class higher education and research institution. Operating under the supervision of the French Ministry of the Armed Forces, École polytechnique is a founding member of the *Institut Polytechnique de Paris*, alongside five other prestigious Grandes Écoles: ENPC, ENSAE, ENSTA, Télécom Paris and Télécom SudParis. Strongly international in outlook, École polytechnique combines research, education and innovation at the highest scientific and technological levels. With 23 laboratories, including 22 joint research units with the CNRS, the research center of l'X operates at the frontiers of knowledge, addressing major interdisciplinary scientific, technological and societal challenges.

The successful candidate will join the *Department of Computer Science* (DIX) of École polytechnique, which is responsible for teaching and research in computer science, in close collaboration with the *Laboratory for Computer Science of École polytechnique* (LIX). Founded in 1988, LIX is a leading research laboratory in computer science, structured around three main research axes:

(i) Foundations of computational structures,
(ii) Efficient, robust and secure models and algorithms,
(iii) Artificial Intelligence.

LIX brings together more than 200 members, including 75 permanent researchers and faculty members, as well as over one hundred PhD students. It is organized into five divisions and sixteen research teams. The laboratory is a joint research unit with the CNRS (UMR 7161) and

is also a partner of Inria through six joint project teams. LIX is distinguished by numerous academic achievements, including the presence of a permanent member of the French Academy of Sciences, several prestigious awards (CNRS Bronze Medals, De Bruijn Prize, Coons Award, Logic & Foundations Prize, among others), five ERC grants, and strong involvement in European and ANR collaborative projects, industrial chairs, and partnerships.

This position is part of the two chairs Trustworthy and Responsible AI and AI and Optimization for Mobility. Selected candidates will play a key role within the ORAILIX team at LIX, actively contributing to its research and academic activities, particularly within the two above chairs.

The *DIX* Department is responsible for computer science education across École polytechnique's academic programs: the Bachelor of École polytechnique, the Polytechnician Engineering Program, and the professional Master's programs MSc&T (Master of Science and Technologies). The department leads or co-leads several specialized tracks, including Cybersecurity; Internet of Things; Large Language Models; Graphs and Applications; Science & Technology in Extended Cinematography; Trustworthy and Responsible AI; Visual and Creative Artificial Intelligence. The department also contributes to teaching and co-directing national research master's programs within Institut Polytechnique de Paris, such as MPRI (Paris Master of Research in Computer Science), MPRO (Paris Master of Operation Research), Cyber-Physical Systems (CPS), Interaction, Graphics and Design (IGD), among others.

In addition, the recruited person will be a member of the IDIA Department (Computer Science, Data and AI) of Institut Polytechnique de Paris, which brings together the scientific communities at the Institute level. Committed to attracting top talent among its faculty, research staff and students, and to expanding access to its excellence programs, École polytechnique is firmly dedicated to diversity, gender equality and inclusion. As part of its recruitment process, all applications are considered without any form of discrimination[1]. École polytechnique is a diverse institution committed to preserving and strengthening this diversity. In 2025, 41% of faculty members, 55% of PhD students and 45% of students are international. In the same year, 42% of newly recruited faculty were women, and women represent 25% of the overall professorial staff.

Job Description

Host team

ORAILIX team in the LIX laboratory

[1] In accordance with Articles L1132-1 of the Code du travail and Article 225-1 of the Code pénal.

Research Area
Artificial Intelligence, Deep Learning and Large Language Models

Position
Monge positions are full-time tenure track faculty positions, in the form of a three-years contract renewable once. The Monge faculty member is expected to defend his habilitation a diriger les recherches before coming up for tenure. After 6 years, the holder shall be promoted as Professor, provided that the evaluation of his or her research, teaching, and related activities is positive.

Context
École polytechnique, in partnership with industrial and institutional partners, is implementing an ambitious recruitment plan to significantly strengthen its research and teaching capacities in Artificial Intelligence.

This initiative responds to a strategic ambition: to affirm and further strengthen the central role of École polytechnique, and more broadly of the Institut Polytechnique de Paris, as a key center of excellence in Artificial Intelligence research, education, and innovation. The successful candidate will benefit from an exceptional, dynamic environment conducive to the development of large-scale, structuring projects, involving local, national, and international research partners.

This position is part of the two chairs *Trustworthy and Responsible AI* and *AI and Optimization for Mobility*. Selected candidates will play a key role within the *ORAILIX* team at *LIX*, actively contributing to its research and academic activities, particularly within the two above chairs.

This recruitment target outstanding profiles in Artificial Intelligence specializing with strong expertise in one or more of the following areas:

- Deep Learning and large language models (LLMs) and their applications.
- Efficiency and optimisation of LLMs. Interpretability and white-box analysis of deep learning models.
- Security and reliability of LLM computations, including adversarial attacks.
- Training data memorisation: Privacy attacks and defence.
- Uncertainty quantification and hallucination mitigation.
- Multi-agents and their security.
- AI for security

Selected candidates will be recruited under the two chairs Trustworthy and Responsible AI and AI and Optimization for Mobility with the following responsibilities:

- Conduct research projects within the two chairs Trustworthy and Responsible AI and AI and Optimization for Mobility, and contribute to their scientific and educational activities
- Co-supervise PhD students.
- Publish in high-impact journals and participate in top-tier conferences.

- Contribute to and benefit from collaboration opportunities and funding through industrial and academic partnerships within the ORAILIX team.
- Contribute to the teaching and research activities of the new Master's program in Trustworthy and Responsible Artificial Intelligence (TRAI) as part of the IA Cluster project at École polytechnique.
- Developing and implementing project-based pedagogical approaches that strengthen the link between teaching and research is particularly valued for this position.
- Teach computer science courses at various levels, including the Bachelor's cycle, the Engineering Program (cycle ingnieur polytechnicien), and Master's programs.

More broadly, a contribution to major societal and environmental challenges, in line with the institution's commitments, will be expected.

Prerequisites

For an Assistant Professor, we required a completed PhD and dynamic postdoctoral research experience or equivalent, demonstrating scientific independence beyond the doctoral work. The candidate's research output must be evidenced by recognized publications in their field of expertise, with an approach favoring quality over quantity. The proposed research project should be embedded in a clear and well-structured vision, highlighting the candidate's own scientific contribution. Where appropriate, the successful candidate must also demonstrate the ability to integrate into the ORAILIX research team of the LIX, clearly articulating the scientific synergies as well as the added value of their recruitment.

Demonstrated experience in teaching computer science is expected, along with the ability to adapt to the various academic programs of École polytechnique. The candidate should also show sufficient perspective to address the pedagogical challenges associated with teaching computer science and Artificial Intelligence.

Application Process

Applications must be submitted directly via the Calliopé platform:
https://candidatures-calliope.polytechnique.fr/calliope-fo/accueil/

Interested candidates are invited to submit the following documents:

- A complete CV detailing their academic and professional background.
- A description of their teaching and research projects, outlining their contributions and future plans.
- Three recommendation letters supporting their application.

The application deadline is March 15, 2026, and submissions must be made through École

polytechnique official website. Interviews are scheduled for April 2026.

Contact

Candidates are strongly encouraged to contact the department in advance to discuss and refine their teaching and research projects:

- Emmanuel Haucourt, president of the DIX, about teaching,
- Damien Rohmer, head of the LIX, about research,
- Sonia Vanier and Jesse Read for questions concerning the ORAILIX team.