

Laboratoire d'Informatique (LIX), École Polytechnique, Institute Polytechnique de Paris.

Tenure Track Assistant Professor Position in Trustworthy and Responsible AI, Optimization, and Reinforcement Learning.

Application deadline: April 4, 2025 Start date: September 1, 2025

École Polytechnique is part of the Institut Polytechnique de Paris, a leading French institute that combines high-level research, higher education, and innovation at the forefront of science and technology.

The Department of Computer Science at École Polytechnique is recruiting a Tenure Track Assistant Professor¹, starting on September 1, 2025. The selected candidate will also be part of the Institut Polytechnique de Paris and the IDIA department.

The 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 chairs: *Trustworthy and Responsible AI* and *AI and Optimization for Mobility*.

We are looking for outstanding researchers specializing in artificial intelligence and operations research, with a strong interest in reliable and responsible AI, addressing both fundamental and applied challenges. Our primary goal is to strengthen our expertise in trustworthy, responsible, and secure AI, with particular attention to environmental and reliability issues. This includes developing innovative solutions in explainability, transparency, and security of AI technologies by hybridizing reinforcement learning, network optimization, and optimization under uncertainty.

We are particularly interested in candidates with expertise in the following areas: Deep reinforcement learning and model-based reinforcement learning, Decision Transformers and sequence modeling, Data-driven decision-making approaches, Network optimization, Explainable and secure AI, Optimization under uncertainty, or Bi-level optimization.

École Polytechnique is an equal opportunity employer; we value diversity in teaching and research and will consider all applications equally, regardless of gender, age, geographical origin, or disabilities.

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 ClusterIA 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 Ingénieur Polytechnicien*), and Master's programs.

Where possible, teaching should integrate the United Nations' Sustainable Development Goals. École Polytechnique offers an outstanding academic environment with tailored pedagogical support and access to scientific and administrative resources through the DIX department and LIX laboratory, as well as promotion opportunities to professor positions upon

obtaining the HDR. More information about the department is available on its website.

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, highlighting their contributions and future perspectives.
- Three recommendation letters supporting their application.

The application deadline is April 4, 2025, and submissions must be made via the official École Polytechnique application site. Interviews are scheduled for early May 2025.

Candidates are strongly encouraged to contact department members before submitting their applications to discuss and refine their teaching and research projects:

- Samuel Mimram, President of DIX, for teaching-related questions;
- Gilles Schaeffer, Director of LIX, for research-related questions;
- Sonia Vanier and Jesse Read for questions concerning the *ORAILIX* team and the *Trustworthy and Responsible AI (TRAI)* Master's program.

Department of Computer Science (DIX), Laboratoire d'Informatique (LIX), École Polytechnique, Institut Polytechnique de Paris.

¹Assistant Professor positions are full-time positions intended for young researchers holding a PhD, such as postdoctoral researchers. These positions are similar in teaching load to that of a *Maître de Conférences* in French universities. However, prior qualification by the CNU is not required.