

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

## 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 institution that combines high-level research, higher education, and innovation at the forefront of science and technology.

The Computer Science Department of École Polytechnique is opening a permanent **Assistant Professor** position, with a start date of September 1, 2025. The selected candidate will also be part of the Institut Polytechnique de Paris and the IDIA department.

This faculty position is part of the *ClusterIA* project at École Polytechnique and supports the new *Master's program in Trustworthy and Responsible AI (TRAI)*.

The selected candidate will play a key role in the teaching team of the TRAI Master's program and actively contribute to its academic and research activities.

We seek an outstanding early-career researcher specializing in artificial intelligence and operations research, with a strong interest in trustworthy and responsible AI, addressing both fundamental and applied challenges. Our main objective is to strengthen our expertise in trustworthy, responsible, and secure AI, with particular attention to environmental and reliability issues. This includes developing innovative solutions for explainability, transparency, and security in AI technologies, combining reinforcement learning, network optimization, and optimization under uncertainty in a hybrid manner.

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 give equal consideration to all applications, regardless of gender, age, geographical origin, or disability.

The selected candidate will be recruited within the framework of the *ClusterIA* project at École Polytechnique and will be involved in the two chairs *Trustworthy and Responsible AI* and *AI* and *Optimization for Mobility*, with the following responsibilities:

- Contribute to the coordination of the new Master's program in Trustworthy and Responsible AI (TRAI) and actively participate in its teaching and research activities.
- Teach computer science courses at various levels, including the Bachelor's program, the Ingénieur Polytechnicien program, and Master's programs.
- Develop and implement project-based pedagogical approaches that strengthen the link between teaching and research, which is particularly valued for this position.

- Conduct research projects and publish in high-level journals, as well as participate in top-tier conferences.
- Co-supervise PhD students.
- Contribute to and benefit from collaboration opportunities and industrial partnership funding, particularly through the *Trustworthy and Responsible AI* and *AI and Optimization for Mobility* chairs.

Whenever possible, teaching should integrate the United Nations' Sustainable Development Goals.

École Polytechnique offers an exceptional academic environment, with tailored pedagogical support and access to scientific and administrative resources through the *DIX Department* and the *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 detailed CV outlining their academic and professional background.
- A description of their teaching and research projects, highlighting their contributions and future perspectives.
- Three recommendation letters in support of their application.

The application deadline is April 4, 2025, and submissions must be made through École Polytechnique's official website. 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, Chair of the DIX Department, for teaching-related questions;
- Gilles Schaeffer, *Director of LIX*, for research-related questions;
- Marie-Paule Cani, Dean of the Master of Science and Technology programs;
- Sonia Vanier and Jesse Read for questions regarding the Master's program in Trustworthy and Responsible AI (TRAI).

Department of Computer Science (DIX), Computer Science Laboratory (LIX), École Polytechnique, Institut Polytechnique de Paris.

<sup>&</sup>lt;sup>1</sup>Assistant Professor positions are full-time faculty positions intended for early-career researchers holding a PhD, such as postdoctoral researchers. These positions are similar in teaching responsibilities to the *Maître de Conférences* positions in French universities. However, prior qualification by the CNU is not required.