Department of Computer Science

Full-time Assistant Professor Position in Trustworthy and Responsible AI, Optimization and Reinforcement Learning



Application deadline: April 4, 2025

Starting: September 1, 2025

École polytechnique is part of Institut Polytechnique de Paris, a leading French institute that combines top-level research, academics, and innovation at the cutting-edge of science and technology.

The department of computer science at École polytechnique is opening a permanent Assistant Professor position¹, 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 position is part of the AI Cluster project at École polytechnique and supports the new master program Trustworthy and Responsible AI (TRAI). The selected candidate will play a key role in the teaching team of the TRAI master program and actively contribute to its academic and research activities.

We seek an outstanding junior researcher, with specialization in artificial intelligence and operations research, with a strong interest in trustworthy and responsible AI, addressing both foundational 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 education and research, and we will give equal consideration to all applications, regardless of gender identity, age, geographical origin, disability status.

The assistant professor will be recruited under the *AI Cluster* project at École polytechnique, with the following responsibilities:

• Contribute to the coordination of the new master program in *Trustworthy and Responsible*AI (TRAI) and actively participate in teaching and research activities.

¹Assistant professor positions are full-time positions dedicated to young researchers with a PhD, such as post-doctoral students. These positions are similar, in terms of teaching duties, to those of maître de conférences in French universities. A prior qualification of the applicant by the national CNU is however not required.

- Teach computer science courses at various levels, including the bachelor program, engineering cycle (cycle ingénieur polytechnicien), and master programs.
- Develop and implement project-based teaching approaches that strengthen the links between teaching and research, which is particularly valued for this position.
- Conduct research 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 the *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. More information on 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, outlining their contributions and future plans.
- Three recommendation letters supporting their application.

The application deadline is April 4, 2025, and submissions must be made through École polytechnique's official website. Interviews are scheduled for 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, about teaching,
- Damien Rohmer, for LIX, about research,
- Marie-Paule Cani, as dean of the Master of Science and Technology programs,
- Sonia Vanier and Jesse Read for the master program in Trustworthy and Responsible AI.