



FACULTY RECRUITMENT PROFILE

Tenure Track Assistant Professor

CVN, L2S, LISN, MICS Laboratories / Mathematics Department

Reference : CLMMat2307

Title: Assistant Professor

Position: Assistant Professor (tenure track) in Artificial Intelligence at the Department of Mathematics, Faculty of CentraleSupélec, Paris-Saclay Campus. The laboratory will be one of the following laboratories:

- CVN (Center for Visual Computing) ;
- L2S (Laboratory of Signals and Systems) ;
- MICS (Laboratory of Mathematics and Computer Sciences).

Following CentraleSupélec's hiring policy for the position of tenure-track Assistant Professor, a 5-year fixed-term contract under public law is proposed with a transition to a tenured position (permanent contract) pending a five-year performance review by an internal commission at the institution.

CNU Section: 26, or 61.

Domain / Job profile: (*short description of domain*)
Assistant professor in Artificial Intelligence

Keywords:

Artificial Intelligence, Mathematical Foundations of AI, Knowledge representation and reasoning, Deep learning, Statistical learning, Decision models, Optimization, Computer Vision, Data Processing (Signal, Image, ...), Natural Language Processing, Operations research, High Performance Data Analysis.

CentraleSupélec, a member of the University of Paris-Saclay (13th in the Shanghai ranking, et 1st in Mathematics), is a public scientific, cultural and professional institution (EPSCP in French) under the authority of the French Ministry of Higher Education and Scientific Research and the Ministry of the Economy, Industry and Digital Technology. Its primary missions are: (i) the training of high-level scientific general engineers, (ii) research in engineering and systems sciences, and (iii) executive education. CentraleSupélec actively contributes to the SaclAI project.

The Department of Mathematics aims to cover the disciplinary field of Mathematics on the CentraleSupélec engineering course, and more broadly, on all of CentraleSupélec's training courses. This department actively contributes to the teaching of the Master of Sciences at CentraleSupélec, in particular the "Master of Science in Artificial Intelligence" (Ranked 2nd in Artificial Intelligence, Eduniversal) and the "Master of Science in Data Science and Business Analytics" (Ranked 3rd Worldwide in the field), as well as Bachelor level courses. He also contributes to the teaching of the Master of Mathematics at the University of Paris-Saclay.

Academic profile:

The successful candidate will join the Mathematics Department of CentraleSupélec. It is expected that she invests, for at least 50% of her service, in various lessons of the Master of Science in Artificial Intelligence (Optimization for Machine Learning, Decision Modeling, ...), and complete her service with lessons in other courses within CentraleSupélec and/or the University of Paris-Saclay.

Depending on their profile, the successful candidate could contribute to the common core courses of the engineering curriculum (measurement theory, probabilities, statistics, etc.). She will also participate in the supervision of student projects in artificial intelligence at all levels of the course (MSc, research course, 2nd year, 3rd year, Bachelors). Interventions may be made in continuing education.

The teaching service will be reduced at the start, in order to allow the installation of the recruited person.

As the lessons of the MSc AI are taught in English, the ability to speak this language is necessary.



Research profile:

Recruited individuals will develop high-impact research in artificial intelligence. The research profile is broad and includes all aspects of the field of artificial intelligence, including and not limited to statistical/deep learning, optimization, decision models, operations research, knowledge representation and reasoning, vision computer-based, image/signal processing, natural language processing, mathematical foundations of artificial intelligence.

The interest of the people sought for Artificial Intelligence applications will be appreciated in the field of:

- Health/medicine,
- Industry 4.0,
- New forms of mobility/transport,
- Energy.

Additionally, interest in the ethical and responsible implementation of Artificial Intelligence and its applications in the service of society will be highly appreciated. Depending on their research profile, the person will join either of the CVN, L2S, LISN, or MICS Laboratory and develop high-impact research in Artificial Intelligence and related fields while strengthening and extending the scientific scope of the of the host laboratory.

Candidate profile:

The person must hold a doctorate (Ph.D.) in Artificial Intelligence (see keywords), have proven their ability in conducting research, and have an excellent publication record in major conferences and journals in the field. The recruited person will have to develop their research activity and interact with the other teams of the host laboratory, and other teams of the "Hub IA" of CentraleSupélec.

Recruitment interview:

For the candidates selected, the audition will follow three stages:

- A presentation of the candidate's background and integration project;
- An illustration of a 5-minute lesson in English at the undergraduate / graduate level illustrating a concept in AI. The topic is identical for all candidates and will be specified in the invitation letter;
- An exchange with the members of the committee.

The duration of the three parts of the audition will be specified in the invitation letter.

Application:

File in pdf format, including:

- A cover letter ;
- A detailed CV (teaching experience, research, mobility, publications, etc.);
- A research project in which the chosen laboratory and research team will be specified, and a teaching project (5 to 10 pages);
- A copy of an identity document;
- A copy of the doctoral degree;
- All documents attesting previous experience

The application must be sent by email to the following contact person before May 29, 2023, at 23:59 (Paris time) the latest with **CLMMat2307** as a reference:

drh.pole-enseignant@centralesupelec.fr

Scientific contacts:

- Vincent Mousseau, Head of the Master of Science in AI, vincent.mousseau@centralesupelec.fr
- Erick Herbin, Head of the Mathematics department, erick.herbin@centralesupelec.fr
- Frédéric Pascal, head of the HubIA at CentraleSupélec, vice head of the DATAIA institute. frederic.pascal@centralesupelec.fr