



CentraleSupélec

FACULTY RECRUITMENT PROFILE
Assistant professor position (tenure track)
MICS laboratory
Référence : GMCFCDDMICS2002

Title: Assistant Professor position (tenure track) in Statistical Learning, Deep Learning, Data Science, Artificial Intelligence

Position: Assistant Professor (tenure track) in Statistical Learning / Deep Learning / Data Science/ Artificial Intelligence, at the Faculty of Mathematics, CentraleSupélec, Paris-Saclay Campus / Laboratory of Mathematics and Informatics (MICS), at the Assistant Professor level; 5 year « CDD de droit public ». Following CentraleSupélec's recruitment policy for Tenure Track positions, a change to a permanent contract will be examined during the five years by an internal commission within the institution.

CNU Section: 26, 27 or 61

Domain / Job profile: Assistant professor in statistical learning / deep learning / data science / artificial Intelligence

Keywords: *deep learning, statistical learning, computational systems biology, medical imaging.*

CentraleSupélec is a public scientific, cultural and professional institution (EPSCP in French) under the authority of the Ministry of Higher Education and Scientific Research and the Ministry of the Economy, Industry and Digital Technology. Its main missions are the training of high-level scientific general engineers, research in engineering and systems sciences, and executive education.

The Mathematics Faculty is an academic department of CentraleSupélec whose educational scope covers the broad field of Mathematics for the 3-year CentraleSupélec Engineering curriculum. The faculty is also actively involved in the Master's program "Mathematics and applications" of Université Paris Saclay as well as in international MSc programs such as in Data Science & Business Analytics (ranked 3rd worldwide) and Artificial Intelligence at CentraleSupélec.

The Laboratory of Mathematics and Informatics (MICS) at CentraleSupélec develops methodological and applicative research for the modeling and analysis of complex systems and data in various fields, including theoretical development in statistics, optimization, machine learning and applications in life science.

Academic profile:

The person recruited will teach within the Faculty of Mathematics at CentraleSupélec, at both undergraduate and graduate levels:

- in the 3-years core curriculum at CentraleSupélec;
- in several master's degree programs: MSc "Data Science and Business Analytics" and "Artificial Intelligence", master in Artificial Intelligence of the Graduate School of Engineering and System Sciences, University of Paris-Saclay;
- as well as in the continuing education program.

He will participate in the animation of the "AI Hub":

- Industrial partners' club and business seminars;
- Follow-up of CentraleSupélec and Graduate School AI students club.

He will also participate in the supervision of student projects in statistics and artificial intelligence at all levels of the curriculum ("parcours recherche", 2nd year, 3rd year). The successful candidate will participate in the supervision of integrative teaching, within his scientific expertise.



The teaching service will be reduced during the 1st year, in order to allow an optimal integration of the recruited person in the faculty.

As some of these courses are taught in English, the ability to teach in English is necessary.

Research profile:

The person recruited will join the Laboratory of Mathematics and Informatics (MICS Lab). The candidate is expected to develop high impact research in:

- the development of mathematical and computational methods in statistical learning and/or deep learning;
- the application of artificial intelligence to problems of the socio-economic world, in interaction with the different teams of the laboratory.

Artificial Intelligence in the bio-medical field is one of the privileged axes.

Candidate profile:

The candidate should hold a Ph.D. in Statistics or Optimization or Machine Learning or Data Sciences Computer vision or Artificial Intelligence with a proven track record on producing cutting edge research supported by an excellent publication record. While it is not a necessary condition, priority will be given to applicants with proven record in statistical and deep learning approaches developed for medical applications, either in genomics, systems biology, network medicine, epidemiology, or medical imaging.

The person recruited is expected to develop his own research portfolio, secure competitive funding for the further development of its research agenda and interact with the other teams of the MICS laboratory and with other teams in the same field within the "Hub IA" transverse axis of CentraleSupélec as well as the Institute Gustave Roussy in the context of the national research initiative of precision medicine PRISM.

Recruitment interview:

For the candidates selected for the audition, the audition will take place in three stages:

- A presentation of the candidate's background and integration project;
- An illustration of a 5-minute lesson, given in English, on a problem, whose subject is identical for all candidates, will be specified on the invitation;
- An exchange with the members of the committee.

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

Candidatures:

File in pdf format, including:

- A cover letter
- A detailed CV (teaching experience, research, mobility, publications, etc.)
- An integration project
- A copy of an identity document
- A copy of the doctoral degree
- And any documents that attest previous experience

must be sent by email only to the two contacts below before the 28nd of May, 2020 at the latest with the reference **GMCFCDDMICS2002**:

Lorraine Maret, human resources: lorraine.maret@centralesupelec.fr

Elodie Ledoux, human resources: elodie.ledoux@centralesupelec.fr

Scientific contacts:

P.-H. Cournède, head of the MICS laboratory, paul-henry.cournede@centralesupelec.fr

E. Herbin, head of the Faculty of Mathematics, erick.herbin@centralesupelec.fr

F. Pascal, coordinator of the transverse axis in Artificial Intelligence at CentraleSupélec, frederic.pascal@centralesupelec.fr