

## Associate/Full Professor on AI and Computer Vision

### **Context**

As a world leader in higher education and research in aerospace engineering, ISAE-SUPAERO offers a complete and unique range of advanced academic programs including the ISAE-SUPAERO engineering program, the CNAM-ISAE apprenticeship program, the Master of Science in Aerospace Engineering, 16 advanced masters and 6 Doctoral schools. ISAE-SUPAERO has developed a research policy resolutely focused on answering the future needs of the aerospace industry and other high technology sectors.

At the international level, ISAE-SUPAERO is a membership of T.I.M.E and PEGASUS and cooperates with premier European universities (TU Munich, TU Delft, ETSIA Madrid, Politecnico Torino and Milano, KTH Stockholm, Imperial College, Cranfield), North American institutions (Caltech, Stanford, Georgia Tech, UC Berkeley, EP Montreal...), Latin American and Asian universities. The ISAE-SUPAERO learning community includes 101 professors and researchers, 1800 lecturers from industry, and nearly 1700 undergraduate students. Every year, over 30% of the Institute's graduates are international students, and the alumni network includes over 17000 former graduates.

The scientific activity for Education and Research at ISAE-SUPAERO is organized in departments, including the Complex Systems Engineering Department (DISC). DISC develops skills on mathematics and informatics for aerospace engineering, it focuses on the models, methods and tools required for complex systems.

In such a context, ISAE SUPAERO is recruiting an associate or full professor on AI and Image. The associated profile, and more specifically the associated research and teaching activities, is described below.

### **Teaching Duties**

The recruited applicant will participate in the full span of ISAE SUPAERO training programs: « Grande École » engineering cursus, Masters, and Executive education. In the short term he/she will take responsibilities in his/her domain within these programs. His /her mission includes:

- Design, and deploy contributions for the courses on Artificial Intelligence, and Image acquisition/processing/exploitation as well as for the courses in closely-related domains such as: Data Science, algorithms and models for Computer Vision, and associated application domains.
- Coordinate and/or participate in the management of specializations on Artificial Intelligence and Computer Vision, within the engineering cursus (and more specifically in the Data Science specialization at master level), and within the executive training cursus.
- Teach in existing courses on AI, Data Science and Computer Vision and manage such existing courses in the Data Science, Signal and Systems and Earth Observation trainings.
- Lead the pedagogical evolutions on his/her fields of expertise, and groom the industrial and academic network contributing to the related training programs and projects.
- Stay up-to-date on the field's evolution and its applications. Steer the corresponding training programs to adequately adapt the profiles of trained students.
- Tutor student projects in the different stages of their training (Bachelor, Master, final projects...), both inside ISAE-SUPAERO and externally, in the framework of cooperative industrial or research agreements.

### **Research duties**

The recruited applicant will conduct high-level research in Artificial Intelligence, and Machine Learning for Computer Vision. His/her contributions allow him/her to tackle various applications, in line with ISAE-SUPAERO's research activities: from Computer Vision for Earth Observation and Autonomous Systems (drones, robots, satellites,...) to decision processes and diagnostics (maintenance, etc.). He/she will join the Decision Systems team within the DISC (Department of Complex Systems Engineering – the Computer Science and Mathematics department) where he/she will set out his/her research project. His/her mission statement includes:

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- Directly contributing, on his/her scientific domain, to the research activities of the Decision Systems team and formulating a personal research project in line with the existing activity. Cooperations with the other teams within the DISC will also be appreciated.
- Contributing to the visibility and dissemination of ISAE-SUPAERO's research by the publication in top-ranked journals, participation in conferences, international scientific societies, and more generally by participating in the local, national and international research ecosystem.
- Participating to the animation of the department's scientific life and projects, in particular by taking part in relevant collaborations, by maintaining a scientific watch on his/her field, in order to insure the relevance of the Institute's scientific policy.
- Tutoring interns and PhD students.
- Participating in the development of the general set of ISAE-SUPAERO scientific tools and toolboxes, within his/her field of expertise, through collaborative internal projects.
- Contributing to the general resources and funding of the Institute, through private or academic partnerships, and valorization of research results.

### **Requirements**

The candidate holds a PhD in Artificial Intelligence, Computer Vision, Data Science, Computer Science, Robotics, Applied Mathematics or a related discipline. He/she has the disciplinary and interdisciplinary skill required for teaching in Artificial Intelligence, Data Science and Computer Vision.

Acquaintance with engineering trainings or an engineering diploma would be appreciated.

He/she proves the relevance of his scientific project, specially with his research publication record. He/she has a taste for teaching, innovative pedagogy and wishes to join an ambitious training project.

Candidates are strongly encouraged to contact the department's research teams to define their academic project and learn more about current topics of interest.

### **Contacts**

For more information:

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Send CV and cover letter (reference: fiche de poste ISAE-576) at:

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**Application deadline : March 29th, 2019**