



Grenoble INP - UGA is a member of **international** engineering and management education and research **networks**. It is widely recognized in national and international rankings.



**8** schools + **39** laboratories

**8 300** students

**1 300** teaching, research, administrative and technical staff

Grenoble INP-UGA is a renowned public institution of higher education and research, and a major player in the Grenoble ecosystem. It is the engineering and management institute of Grenoble Alpes University, and plays a leading role in the scientific and industrial community.

## University lecturer Position

<b>Short profile</b>	Deterministic and random optimization: theory, algorithms and applications
<b>Body</b>	University lecturer
<b>Position number</b>	26 MCF 0194
<b>CNU Section</b>	26
<b>Site</b>	Grenoble
<b>Start by</b>	01/09/2023
<b>Key words</b>	mathematical optimization, random/distributed/stochastic algorithms, numerical applications

Grenoble INP - UGA is a leading public institution accredited with the French label "Initiative d'excellence". It offers innovative engineering and management programs, with an increasing internationalization of its course offers. The courses are grounded in sound scientific knowledge and linked to digital, industrial, organizational, environmental and energy transitions. The Engineering and Management Institute of Grenoble Alpes brings together more than 1300 staff members (teacher-researchers, lecturers, administrative and technical staff) and 8300 students, located on 8 sites (Grenoble INP - Ense3, Grenoble INP - Ensimag, Grenoble INP - Esisar, Grenoble INP - Génie industriel GI, Grenoble INP - Pagora, Grenoble INP - Phelma, Polytech Grenoble, Grenoble IAE and the INP Prepa). Grenoble INP is also a highly-ranked institution of higher education and research, leading the way in the fields of engineering and management on an international scale. It is a member of a large number of international academic and research networks. It is part of the European University UNITE!.

As part of Grenoble Alpes University, Grenoble INP has associated guardianship of 39 national and international research laboratories and of technological platforms. The research conducted there benefits both its socio-economic partners and its students. Grenoble INP is at the heart of the following scientific fields: physics, energy, mechanics and materials; digital; micronanoelectronics, embedded systems; industry of the future, production systems, environment; management and business sciences.

Grenoble INP - UGA is an equal opportunity employer committed to sustainability. Grenoble INP-UGA celebrates diversity and equity and is committed to creating an inclusive environment for all employees. All qualified applications will be considered without discrimination of any kind.

# Teaching

**School:** Grenoble INP - Ensimag

**School website:** <https://ensimag.grenoble-inp.fr/>

**Contacts:** [vivien.quema@grenoble-inp.fr](mailto:vivien.quema@grenoble-inp.fr), [christophe.picard@grenoble-inp.fr](mailto:christophe.picard@grenoble-inp.fr)

Grenoble INP-Ensimag is one of the best French schools in the digital field. It provides very high-quality training programmes in the fields of computer science and applied mathematics. It prepares students for careers as digital engineers in many sectors such as information systems, finance, embedded systems, networks, and all industries for design and decision support tools.

## Teaching Profile:

This position fits within the scope of the training strategy at Ensimag where there is a need for facilitation, supervision and training in deterministic/stochastic optimisation and, more broadly, in applied mathematics. Optimisation is at the heart of data science (machine learning, AI, decision support, etc.) and digital tools for industry and other application fields. The successful candidate will teach in the fields of optimisation and learning, within the various specialised courses of the school, as well as in the mathematics courses in the first- and second-year common core.

# Research

**Host laboratory:** LJK (UMR 5224 Grenoble INP - UGA, UGA and CNRS)

**Laboratory website:** <https://www-ljk.imag.fr/>

**Contacts:** [jean-guillaume.dumas@univ-grenoble-alpes.fr](mailto:jean-guillaume.dumas@univ-grenoble-alpes.fr)

The Laboratoire Jean Kuntzmann (LJK) is a research laboratory in applied mathematics and computer science that brings together teams of probabilistic-statisticians, numerical engineers, and specialists in image and vision processing.

The diversity of its disciplines provides the structure with a wealth of research topics and also of human potential. It is precisely because of this richness that the LJK is so dynamic and the fundamental challenge for its management is to maintain this emulation through a policy of structural cohesion.

The LJK cultivates close working relationships with companies, in particular through the MaiMoSiNE and AMIES structures.

## Research Profile:

The LJK wishes to consolidate its focus on mathematical optimisation and its interactions with machine learning, signal processing, game theory, control, and optimal transport.

Applicants from all fields of optimisation (deterministic, random, under uncertainty, online, distributed, multi-agent, conic, convex analysis...) will be considered and special attention will be paid to applicants that combine theory, algorithms and applications. In addition, experience in software development is welcome.

The successful candidate will join the DATA department and contribute to the internal collaborations within the LJK and with other laboratories in Grenoble. He/she will play an active role in academic projects and will also be able to reply via MaiMoSiNE to transfer and training requests from Grenoble's industrial community.

## Specific requirements or conditions

Administrative activities related to the duties of an assistant professor: the assistant professor will be in charge of a teaching unit, a programme or a year.

## How to apply

Applicants must submit their applications on the Galaxie Platform of the French Ministry of Higher Education and Research from the 23rd of February 2023, 10 a.m. (Paris time) to the 30th of March 2023, 4 p.m. (Paris time), deadline.

Any document sent outside the Galaxie procedure will not be taken into account.

The interview will include simulation/situational exercises. The details will be communicated when the invitation is sent out. In addition, part of the interview may be conducted in English.