



# Junior Professor Chair Economics of AI and Innovation

## **Junior Professor Chair**

The French junior professor "chair" is a novel recruitment process that provides access to a civil service position as a "Professeur d'Université". After a pre-tenure period of 3 to 6 years and following an assessment, the successful candidate can obtain full tenure at Université Côte d'Azur after approval by a tenure committee.

The junior professor "chair" in 'Economics of AI and Innovation' is fully in line with the research dynamics promoted by Université Côte d'Azur around the uses and impact of AI on society. It will provide original theoretical and empirical insights into the effects of AI innovations on the organizational dynamics of firms, industries, markets, and territories.

It will help strengthen the local policy on this issue, already identified by the presence of the 3IA Côte d'Azur (of which SKEMA Business School, which is associated with this chair application, is a founding member) and the Observatory of Technological, Economic and Societal Impacts of Artificial Intelligence (OTESIA).

Lead institution/organization:

Name of the head of the institution/organization: Jeanick BRISSWALTER Site: Université Côte d'Azur Academic region: South Provence Côte d'Azur region

Partner institutions/organizations: SKEMA Business School, CNRS, Inria

Project name: Economics of AI and Innovation – ECAII

Galaxy ID: 145

Keywords: Artificial Intelligence; Innovation; Industrial Dynamics; Learning; Corporate Governance

**Expected duration**: 4 years

Starting date: September 1<sup>st</sup>, 2022

Scientific theme: Innovation in Artificial Intelligence

Corresponding CNU/CoNRS/CSS section(s): Economics / CNU 05 / CNRS 37





#### Contribution of the project to the strategy of the host laboratory

The objective of this junior professor "chair" is to position the research conducted at UCA in AI economics at the highest scientific level. The successful candidate will join the Group of Research in Law, Economics and Management (<u>GREDEG</u>, a joint research unit of UCA and the CNRS), which is attached to the Graduate School and Research of Economics and Management (<u>EUR ELMI</u>). The candidate will also work in collaboration with SKEMA Business School's '<u>AI school for business</u>', as well as with the various <u>3IA Côte d'Azur</u> chairs. He/she will have to rely on the interdisciplinary approach adopted by the local ecosystem to strengthen existing collaborations and develop links with the best international institutions.

GREDEG is a multidisciplinary research center interested in the study of the dynamics of innovation, knowledge, and industries. Studies include the emergence of innovation, based on the analysis of the relations between coordination mechanisms, knowledge base organizations and innovation performance; the diffusion of innovation, via the explanatory mechanisms of their adoption involving breakthroughs and adaptations in the learning processes; and the impact of innovation on the economy, the organization of industries and firms' conduct and performance. GREDEG is also specialized in the construction and exploitation of large databases at very high levels of disaggregation (at the levels of the firms, establishments, individuals, patents, etc.) from different statistical sources (administrative, public, or private surveys...).

SKEMA Business School has put AI at the heart of its teaching and research project by creating the 'SKEMA AI School for Business'. It has decided to systematically introduce AI in all its academic programs and to conduct multidisciplinary research on this issue. SKEMA Business School is also a founding member of the 3IA Côte d'Azur Institute.

Joint projects between EUR ELMI, GREDEG and SKEMA Business School are already underway, concerning the dynamics of innovation in Artificial Intelligence. These projects aim to provide academic and industrial players with observation and economic analysis tools that will enable them to report on the evolution of AI-related technologies and their applications in various industrial and service fields (see, for example, the report 'Artificial Intelligence - Technologies and Key Players').

#### **Scientific profile**

The successful candidate will develop conceptual frameworks allowing to realize original theoretical and/or empirical works likely to identify the conditions of development and adoption of AI technologies, as well as to evaluate their effects on the structure of markets, the dynamics and the organization of industries and territories, the organization, as well as the performance of firms (decision and incentive structures, coordination modes). He or she will be able to rely on different methodological approaches (simulations, econometrics, experiments, game theory, etc.). A knowledge of artificial intelligence tools (machine learning, clustering, deep learning, etc.) would be appreciated. Particular attention will be paid to the candidate's ability to propose and develop multidisciplinary research projects, implementing





new approaches to artificial intelligence (AI) in economics, management, sociology, or related fields.

## **Teaching profile**

The candidate will be involved in the dynamic of multidisciplinary education, with strong attractiveness, implemented by the EUR ELMI. In particular:

- The Chair will be the linchpin of the creation of an MSc (delivering the grade of Master) cosponsored by UCA and SKEMA Business School in 'Economics of AI and Innovation', starting in the year 2024-2025.

- The candidate will also be able to strengthen doctoral training in the economics of innovation and AI, based on a range of courses in the form of 'minors' (also open to other EUR/ fields of study) and on open thematic schools (summer/winter schools).

- Finally, the candidate will be able to enrich the existing EUR ELMI Masters programs such as Digital Strategy, Industrial Development or Research in Management and Innovation (a joint master's degree with SKEMA Business School), which deal with the impact of innovation on the organization of firms and markets.

The annual teaching volume is set at 42 hours of lectures.

The candidate will also supervise master's students and participate in the supervision of doctoral students.

#### **Funding available**

The successful candidate will receive a monthly salary of 3 445€ gross (2 860€ net). He-she will be awarded €200,000 from the National Research Agency (ANR) including at least €120,000 for doctoral or post-doctoral salaries. An additional startup package will be provided by the EUR ELMI (€155,000 for the funding of a 3-year doctoral contract and the funding of missions and databases) and by SKEMA Business School (€245,000 for the funding of an 18-month post-doctoral contract and a 4-year doctoral contract in the PhD program of SKEMA).

## **Project monitoring indicators and methodology**

The main monitoring indicators are related to scientific dissemination expectations:

1. Follow-up of publications (individual and joint with GREDEG and SKEMA Business School researchers)

- 2. Organization of high-level international conferences/workshops
- 3. Obtaining grants (ANR and European)
- 4. Bringing in new collaborations (national and international)

**Scientific dissemination**: Publications in leading journals in economics (top 10 journals); international conferences and workshops organized on the campus, in collaboration with





SKEMA Business School; fundraising (ANR, European projects); integration in national and international research networks via partnerships with other universities or research centers.

**Open Science**: This Chair fits into the EUR ELMI's initiative to provide quantitative and qualitative indicators to assess the impact of AI innovations on the industrial dynamics of firms. The successful candidate may participate in the construction of an online database, describing patents in artificial intelligence by country, by sector and by year, then broken down by scientific field, by AI technology, by AI function, and by AI application field. Such a database is of interest to social scientists to carry out comparative studies between countries, between sectors, and in dynamics, on the evolution of technological skills related to AI.

**Science and society**: The issues covered by this Chair have an important societal dimension (changes in production methods and new competitive rules, the impact of AI on working methods, etc.) and can easily give rise to communications in public media (conferences, articles in newspapers, blogs, etc.). In addition, in line with the dissemination of knowledge policy encouraged by UCA, EUR ELMI will propose from the beginning of the academic year 2022 a multidisciplinary conference cycle on innovation. The successful candidate will be able to participate in these conferences, which are open to the public, and take part in their organization (invitation of speakers).

#### **Application conditions**

Open to all candidates with no age or nationality limits.

Candidates must hold a doctoral or equivalent degree or proof of scientific titles and work deemed equivalent. Permanent staff of Université Côte d'Azur may not apply.

Applications from junior profiles with potential for supervising and leading research or proof of at least 6 years of research experience are encouraged.

#### **Description of the recruitment process**

Applications will be screened for administrative eligibility by the HR department and only eligible applications will be submitted to the selection committee. The committee will examine the applications and shortlist the candidates for an interview.

All shortlisted candidates will be interviewed by the selection committee.

The interview will last one hour and thirty minutes. 45 minutes will be devoted to the presentation by the candidate of his or her scientific and pedagogical background,





motivations, research, and teaching projects, as well as the presentation of a research paper. This presentation will be followed by 45 minutes of discussion with the jury.

At the end of the interviews, the committee decides on the merit of the candidates and more particularly on the quality and originality of the research and teaching projects presented, the candidates' motivation, vision for the future and ability to supervise research and teaching.

#### Location

Structure: Graduate School and Research in Economics and Management (EUR ELMI)

Campus: St-Jean d'Angely

Address: Campus Saint Jean d'Angély, 5, rue du 22ème BCA, 06300 Nice

## **Application procedure**

Submit your application (to dowload on our website) online before May 31st, 2022, to:

https://galaxie.enseignementsup-recherche.gouv.fr/antares/can/astree/index.jsp

For any question regarding the job description, contact: M. Olivier BRUNO, Dean of the EUR ELMI, <u>Olivier.bruno@univ-cotedazur.fr</u>

For any question regarding the application process, contact: Mme Jessica JAGER, Jessica.jager@univ-cotedazur.fr





# UNIVERSITÉ CÔTE D'AZUR

Open to Europe and to the world, Université Côte d'Azur coordinates higher-education and research activities in the Côte d'Azur region and has created an environment where education, research and innovation meet the highest standards. While engaged in a deep and ongoing transformation of its role and organization, Université Côte local region known for its exceptional quality of life between sea and mountains. In this context, Université Côte d'Azur is recognized for its excellence and is committed to humancentered values, socially engaged, and ethically responsible.

#### > Key figures

# 32.000+ students

component institutions including 8 Graduate School and 6 associate components

50+ laboratories and research units

# 4.600 permanent staff

including **1,600** faculty, **1,200** administrative staff plus around **1,800** lecturers and fellow researchers at CNRS, INSERM, INRIA, INRAE, etc.



#### Good reasons for joining Université Côte d'Azur

#### Attractive working conditions:

• An exceptional scientific and technological environment boosted by the vitality of the IDEX UCA<sup>JEDI</sup> initiative and the 3IA Côte d'Azur Interdisciplinary Institute of Artificial Intelligence.

• A €200,000 grant from the National Research Agency (ANR) and an additional startup package provided by the EUR ELMI and by SKEMA Business School.

• A reduced teaching load for the entire duration of the professorship contract: 42 hours of lectures or 64 hours of group study or tutorials.

• Personalized assistance with settling into life in France provided by the <u>Welcome Center</u>.

• Two coordinators (scientific and institutional) to provide individual support and ensure a smooth transition.

• A wide range of career development opportunities: training programs, mobility and career advice.

#### Social benefits:

- Sports, cultural, and leisure activities.
- Staff cafeteria.
- Partial coverage (15%) of complementary health insurance in addition to basic French health insurance.
- Partial coverage of public transportation costs (50%).
- Sustainable mobility allowance (for cycling, carpooling).
- Full range of French social benefits.

#### A committed university:

• Assistance for persons with disabilities, gender equality, quality of life at work, ethics and scientific Integrity, and eco-responsible campuses.



# Discover the 10 good reasons to join us

All our positions are open to people with disabilities Find all our job offers on the web Working at Université Côte d'Azur