

ANGERS UNIVERSITY

GRANEM (Economics and Management)

Junior Contract Researcher Post-doctoral contract in public law

Category : A

Presentation of the University of Angers

In the heart of a region recognized for its quality of life, the University of Angers, the 3rd largest employer in the region, offers an environment conducive to the development of its staff and students. The UA is a multidisciplinary university, welcoming more than 26000 students spread over 3 campuses and 2 relocated campuses (in Cholet and Saumur). It has 8 components (5 UFR, 1 IUT, 1 internal engineering school and 1 internal business and management school), and 31 federative research units and structures. Thanks to the many innovative projects it carries out and its openness to the world, the UA allows everyone to evolve in a stimulating environment. Its annual budget is \in 156 million (including \in 123 million in payroll). The UA has 1167 teachers and teacher-researchers, 917 administrative and technical staff and nearly 2000 individual contractors and is looking for involved and daring actors. You recognize yourself in this job offer ? Join us !

Contract features:

Starting date : 01/10/2025

Contract duration : 12 months French law work contract Work quota : 100% Monthly wage : 2750€ gross (with benefits including paid vacation, retirement, health insurance) Location : University of Angers, GRANEM Laboratory

Name of research project : TUMULT (TU-games on Multi-graphs)

Description of the research project in which the research activities entrusted to the officer take place:

TUMULT is a research project in cooperative game theory with an application in digital economics, in particular to the problematic of revenue sharing for streaming platform.

Several models in the cooperative game literature account for the ability of different structure (social, geographical, etc) to restrict cooperation. These structures are modeled through the use of graphs or hyper-graphs.

The TUMULT research project aims to :

- Explore the problem of allocation in the context of cooperative games over multi-graphs. This includes the development and analysis of allocation mechanism through a normative axiomatic lens.
- Apply models of cooperative games with graphs (and multi-graphs) to the problematic of allocating the revenue from streaming platform subscription.

Definition of research activities and tasks to be accomplished:

- Research in the field of cooperative game theory
- Investigate the question of allocation in the setup of cooperative game with multi-graphs in collaboration with the PI of the TUMULT project
- Write academic papers for publication in leading journal of the field
- Communication in international conferences
- Take part in the life of the GRANEM research unit

The successful applicant will have the opportunity to do their independent research.

The successful applicant will be part of the GRANEM research unit. This unit is a pluridisciplinary team (Economics and Management), part of the TEPP Federation (CNRS °2042) focused on public policies. It is composed of around 75 researchers, 30 PhD students and 5 administrative staff.

Expected skills :

The successful applicant should hold a PhD in economics, with a focus in game theory or social choice. Applicants with a PhD in applied mathematics or computer science are encouraged to apply, provided their research is in the aforementioned fields.

Preferably, the successful applicant has conducted research in the fields of cooperative games.

Applicants must be able to demonstrate their ability to produce high-quality research, alone and as coauthors.

The ability to develop applications of theoretical models as well as knowledge of digital economics is appreciated.

Qualifications

- PhD (or close to completion) in Economics, Applied Mathematics or Computer Sciences.

In the case that the candidate does not have a PhD degree by the date of their application, they should present a letter from their supervisor certifying that they will obtain their Ph.D. by the 31st of September 2025, at the latest.

Recruitment process

The Assessment Committee will focus on the scientific quality of the application and on the compatibility between the experience and skills of the candidate and the needs of the TUMULT project.

The selection will have two phases :

Phase I : The Recruitment Committee will shortlist applicants based on their research experience, the quality of their research (approach, methodology, results), and their understanding of the TUMULT project
Phase II : Interviews with the shortlisted candidates will be organized. Videoconference will be possible.

Application procedures and contact :

You must submit the following documents by mail at : florian.navarro@univ-angers.fr copy to : recrutement@univ-angers.fr

- CV - Cover letter
- PhD certificate
- A two-pages research statement that sums up your past research and highlights your potential contributions to the project
- A recent sample of your research
- A letter of recommandation (not mandatory)

Deadline for applications: 06/06/2025 This job description is available until the closing date for applications. On that date, it will no longer be available on the website.

If needed, your contact for any further information: <u>florian.navarro@univ-angers.fr</u>

