# Position Offered: UNIVERSITY GRADUATE

# Project: *Creation of a Big Data processing and analysis Unit by using Artificial Intelligence and Scientific Computing tools at CIAL (InteligenCIAL)*

#### **Technological and scientific fields:** Big Data and information processing technologies

**Location:** Madrid, Comunidad Autónoma de Madrid, Instituto de Investigación en Ciencias de la Alimentación, CIAL <u>https://www.cial.uam-csic.es/</u>

**Research Group/PI:** Big Data processing and analysis Unit by using Artificial Intelligence and Scientific Computing tools at CIAL (InteligenCIAL). IPs: Alberto Valdés, Victoria Moreno

#### **PROJECT SUMMARY**

The opportunities of Big Data and AI applications in Food Sciences are notable increasingly, but only a minimal amount of the data that is available has been used. The CIAL combines a solid track record in the application of multi-omics technologies and advanced approaches to determine the composition, structure, digestibility, bioavailability, and other parameters of foods and their ingredients. The objective of this project is to exploit these capabilities and the enormous amount of information that is generated by creating a Data Science Unit with the potential to retain the best-trained talent. This unit will provide the CIAL groups with tools for massive data processing, analysis and integration, and AI through horizontal interaction and synergy with all the center's research lines and service platforms.

## **PROFESSIONAL PROFILE**

#### Minimum requirements:

Required academic qualification: Degree in Telecommunications Engineering or Computer Engineering.

#### Merits to be considered:

Experience in deployment and administration of communications equipment and systems; installation and maintenance of equipment with Linux and Windows operating systems; user support in research environments; deployment of data storage and backup systems; virtualization, installation and technical support of scientific equipment; knowledge of programming languages (Python, R, C++, Java) and scripting languages (Bash, PowerShell).

## WHAT IS OFFERED

Incorporation into a reference research center in the field of Food Sciences where massive data analysis and information processing technologies will play a fundamental role in the future. This contract includes a Training Plan of 240 ECTS credits distributed in two master's degrees focused on Data Sciences and Computer Engineering, as well as a 3-month training stay in an advanced computing center. Attendance at courses dedicated to training in digital skills (Deep Learning, Machine Learning, Cloud Computing, Python, R, Shell, AI or Big Data) is also planned.

#### Contract conditions:

Indefinite contract for a University Graduate associated with the Momentum Project of 4 years' duration according to Spanish science law. Gross annual salary  $(37.000 \in -41.000 \in)$ .

# Start of contract: before 31 December 2024

## PRINCIPAL INVESTIGATOR CONTACT

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