

## **PhD Researcher in Artificial Intelligence**

### **Job Description**

We are DATAI, the Institute of Data Science and Artificial Intelligence at the University of Navarra — a leading research university consistently ranked among the best in Spain. Founded in 1952 by St. Josemaría Escrivá, the university has campuses in Pamplona, San Sebastián, Barcelona, and Madrid.

At DATAI, we drive innovation in AI with real-world impact, applying techniques such as deep learning, explainable AI, and multimodal analysis to tackle major challenges in medicine, energy, sustainability, and society.

### **About the Project**

The NAIARA project (funded by the Government of Navarra) aims to significantly improve the effectiveness and personalization of cancer treatments through artificial intelligence, applied to the combination of radiotherapy and immunotherapy. The selected candidate will join the Digital Medicine Lab team and collaborate closely with professionals from the Clínica Universidad de Navarra, working with real patient data.

### **What You'll Do**

As a PhD researcher, your focus will be on developing AI-based predictive tools to anticipate treatment response in cancer patients. Key responsibilities include:

- Analysis and modeling of longitudinal medical data (MRI scans, clinical and molecular data).
- Design and validation of deep learning algorithms, particularly convolutional neural networks (CNNs).
- Integration of multimodal data using generative modeling techniques.
- Close collaboration with clinical professionals to ensure real-world applicability of the models.

### **Requirements**

#### **Mandatory:**

- Master's degree in Biomedical Engineering, Bioinformatics, Computer Science, Applied Mathematics, or related fields.
- Proven experience in medical image processing, radiomics, or machine learning.
- Strong programming skills in Python.
- Teamwork abilities and good communication skills.
- High level of English (spoken and written).

#### **Preferred:**

- Previous experience with neural networks and/or generative models.
- Knowledge of frameworks such as PyTorch or TensorFlow.
- Familiarity with clinical environments or biomedical research.
- Experience integrating multimodal data.

### **What We Offer**

- Three-year PhD contract (2025–2027), funded by the Government of Navarra.
- Gross annual salary between €18,000 and €19,000, depending on the contract year.
- Work within an interdisciplinary team at the intersection of data science, engineering, and clinical oncology.
- Continuous training and collaboration with international institutions.
- Flexible and motivating work environment, with the possibility of hybrid work.
- The opportunity to live in Pamplona, one of Europe's cities with the highest quality of life.

### **How to Apply**

Send your application to: **rarmananzas@unav.es**

Include:

- Motivation letter (max. 2 pages)
- Curriculum Vitae
- Academic transcripts (Bachelor's and Master's degrees)
- Contact details for two academic/professional references

Shortlisted candidates will be asked to complete a technical assignment remotely and will then be invited to an online or in-person interview.