Position Offered: UNIVERSITY GRADUATE

Project: Enhancing Experimental Data Analysis at INMA Through Artificial Intelligence

Technological and scientific fields: Artificial Intelligence, Nanotechnology, New Materials, Image Analysis.

Location: Zaragoza, Aragón, Instituto de Nanociencia y Materiales de Aragón (INMA), <u>https://inma.unizar-csic.es/en/home</u>

Research Group/PI: Theory, Modelling and Simulation (aTMOS) - <u>https://www.qmad.es</u> / Luis Martín-Moreno

PROJECT SUMMARY

The project focuses on the application of AI to optimize experimental data analysis, and even the techniques themselves, in the field of nanoscience and advanced materials. This interdisciplinary approach combines the expertise of a theoretical group on AI with several experimental groups from INMA, covering areas such as molecular detection, electron microscopy, and the characterization of nanoparticles in biological samples. By improving the accuracy and efficiency of data analysis, the project will not only benefit the teams involved but also promote the use of AI technologies within the institute, enhancing research and development of new materials with advanced applications in energy, biomedicine, and information technologies.

PROFESSIONAL PROFILE

Minimum requirements:

- Bachelor's degree in Physics.
- Proficiency in English.
- Experience in computer programming.

Merits to be considered:

- Previous experience in AI, particularly in designing neural networks.
- Dual degree in Physics and Mathematics.
- Recipient of scholarships in the field of AI.
- Proficient in programming languages such as Python, C, C++, Fortran, and others.
- Recipient of academic awards.
- Proficient in multiple languages.

WHAT IS OFFERED

- Learning and development of innovative AI techniques.
- Interdisciplinary training (biomedicine, energy, microscopy, etc.).
- Over 70 ECTS of training.
- Training stay at a supercomputing center (Institute for Biocomputation and Physics of Complex Systems, Zaragoza).

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

Email: lmm@unizar.es Phone: +34 - 976 76 27 77.







