Position Offered: POSTDOCTORAL RESEARCHER

Project: *Evaluation of the role of wind in wildfires through the use of big data and artificial intelligence (VENTAFOCS)*

Technological and scientific fields: (1) Artificial intelligence; (2) Technologies for processing big data and information; (3) High performance computing; (4) Remote sensing; (5) Climate change and biodiversity; (6) Data analysis; (7) Image analysis and computer vision; (8) Climate services

Location: Moncada, Valencia, Valencia Region. Centro de Investigaciones sobre Desertificación (CIDE, CSIC-GVA-UV, http://www.uv.es/cide/)

Research Group/PI: Disturbances and evolutionary ecology (EvoFire) & Climate Variability and climate services (Climatoc-Lab) / Juli Garcia Pausas and César Azorín Molina

PROJECT SUMMARY

Wildfires depend, a large extent, on the atmospheric situation. High air temperatures, low relative humidity and, mainly, moderate to strong winds, increase the size and severity of fires. The objective of the project is to quantify the role of winds in the fire regime at different spatio-temporal scales (regional and global), and to identify areas where fires spread mainly by winds (wind-driven fire regimes) or fuel (fuel-driven fire regimes). This will allow us to generate the scientific and technological base to, in the future, improve prediction and offer a service (wind-driven fire service) for the prevention and management of wildfires.

PROFESSIONAL PROFILE

Minimum requirements:

Graduate in Physics of Data Science
Master in Earth Sciences and/or Meteorology
PhD in Environmental Sciences, Atmosphere Physics or Data Science
Spanish (proficency); B2-English

Merits to be considered:

Python
Machine learning / Deep learning
Remote sensing
Experience with research projects which applied Artificial Intelligence to Earth Sciences
Participation in international conferences

WHAT IS OFFERED

A multidisciplinary project within 2 research groups that have their own network of collaborators for internships. A training plan of 240 ECTS with which he/she will acquire and/or deepen knowledge in artificial intelligence, data analysis and remote sensing, among others. Access to the CSIC's own annual Training Plan and to its own and national computational resources. A respectful and dynamic working environment with international connections.

Contract conditions:

Indefinite contract for a Postdoctoral Researcher associated to the Momentum Project of 4 years' duration according to Spanish science law. Gross annual salary (41.000 € - 52.000 €).

Start of contract: before 31 December 2024

PRINCIPAL INVESTIGATOR CONTACT

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