



2021-IPR-D5-FGIV-019389

FG IV – Scientific Project Officer - Data scientist - machine learning and artificial intelligence

POSITION FOR:

Member of the contract staff IV – art. 3b of the Conditions of Employment of Other Servants

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1962R0031:20110101:EN:PDF>)

WE ARE:

As the science and knowledge service of the Commission, the mission of DG Joint Research Centre is to support EU policies with independent evidence throughout the whole policy cycle.

The JRC is located in 5 Member States (Belgium, Germany, Italy, the Netherlands and Spain). Further information is available at: <https://ec.europa.eu/jrc/>

The current vacancy is in the Directorate for Sustainable Resources (located in Ispra, Italy). Its mission is to provide independent scientific evidence to support the development, implementation, evaluation and coherence of EU policies, mainly in the areas of agriculture and rural development, development cooperation, environment and climate change, blue growth and fisheries, the bio economy, industry and trade.

The vacancy is within the Food Security Unit, which contributes scientific development towards a more effective, and efficient management of EU policies related to agriculture and food security. More specifically, the position is in the Food and Nutrition security Project Portfolio, which addresses food and nutrition security issues in food insecure countries, in particular in Africa.

WE PROPOSE:

The current open position is related to food security and food crises analysis component of the JRC-INTPA Administrative Arrangement ‘Technical and scientific support to sustainable agriculture, food & nutrition security and food system’ and other food security monitoring activities in the FOODSEC group.

The JRC offers a vacancy for Contract Agent. The candidate will contribute to the research agenda for improving existing methodologies to utilize a variety of variables and data sources (including satellite imagery, global gridded meteorological data, food prices, socioeconomic and macro-economic indicators, data on conflicts) for food security assessment and prediction and will provide direct scientific and technical support in the frame of the JRC-INTPA Administrative Arrangement. In particular the activities will be related to:

- Developing and testing of machine learning (ML) methods and artificial intelligence (AI) for food insecurity estimation and prediction;
- Conducting advanced statistical and spatial analyses of nutrition and food security drivers and indicators.

WE LOOK FOR:

We are looking for a data scientist with at least 3 years research experience in data analysis, machine learning and deep learning.

The ideal candidate should have:

- Completed university studies of at least three years attested by a diploma and at least three years professional experience in a field relevant to the position, or a doctoral diploma in geospatial sciences, remote sensing, image processing, machine learning, big data analytics, applied mathematics and computer science, bioscience and agriculture or related field;
- Excellent programming skills in python are essential, C/C++ or other languages are advantage;

- Experience with deep learning and machine learning packages (e.g. scikit-learn, TensorFlow, Keras, PyTorch) are essential, experience with explainable artificial intelligence is an asset;
- Experience in application of machine learning to regression problems with geospatial data is an advantage;
- Experience in use of geospatial data, including Earth Observation and gridded meteorological data) is an advantage;
- Work experience in Africa and food insecurity context are highly desirable;
- Experience in the use of remote sensing applied to agricultural monitoring is advantage;
- Exposure to the use of food security indicators and classification schemes (e.g. IPC, integrated food security phase classification) is advantage;
- Good communication, coding and writing skills and ability to support training and capacity building are advantages;
- Solid record of research activities relevant for the post including publications in international peer-reviewed journals is an advantage;
- Knowledge of English (B2) is required.

INDICATIVE CONTRACT’S DURATION:

36 months initial contract with possible renewals up to maximum 6 years.

PLACE OF WORK:

Ispira (IT)

ELIGIBILITY CRITERIA:

Candidates for this contract agent post shall:

– (i) have passed a valid EPSO CAST selection procedure;

or

– (ii) be registered in the EPSO Permanent CAST https://epso.europa.eu/documents/2240_en

or

- (iii) be registered in the specialised call for researchers <https://ec.europa.eu/jrc/en/working-with-us/jobs/vacancies/function-group-iv-researchers> (used mainly by the JRC).

With a valid application number to one of the above, you may then apply for this specific vacancy at JRC through: <http://recruitment.jrc.ec.europa.eu/?type=AX>.

RECRUITMENT POLICY:

The JRC

- Cultivates a workplace based on respect for other people and the environment.
- Embraces non-discriminatory practices and equality of opportunity. In case of equal merit, preference will be given to the gender in minority.