EUROPEAN COMMISSION
JOINT RESEARCH CENTRE

2022-IPR-E1-FGIV-021228 **FG IV - Scientific Project Officer – Population modelling**

POSITION FOR:
Member of the contract staff FGIV – 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 Disaster Risk Management Unit of the Directorate for Space, Security and Migration, which provides scientific and technical support to EU policies addressing global security and crisis management. The unit is responsible for the Copernicus Emergency Management Service (CEMS) as well as the Disaster Risk Management Knowledge Centre and the Global Human Settlement Layer (GHSL).

The GHSL project produces new global spatial information, evidence based analytics and knowledge describing the human presence on planet Earth. It relies on the design and implementation of new spatial data mining technologies that allow automatic processing, analysis and knowledge extraction from large amounts of heterogeneous data including global, fine-scale satellite imagery, census data, or volunteered geographic information sources. In this context quantifying, characterising and locating population is an essential data set for a number of application domains including regional and urban policies, disaster risk management.

WE PROPOSE:
A position as population modeller to contribute to the further development of population component of the Global Human Settlement Layer activities. Primarily s/he will develop and apply innovative methods and new data for improving global or regional population density maps.

S/he will be part of the team that is providing policy support in the field of regional and urban policies, disaster risk management as well as the management and further evolution of the Exposure mapping component of the Copernicus Emergency Management Service.

Main tasks will include:

- Further improve the models for the generation of regional and global population density maps by applying state-of-the art methods and data or develop new approaches;
- Contribute to the production of biannual updates of global population density maps in the framework of the Exposure Mapping Component of the Copernicus Emergency Management Service;
- Contribute to the maintenance and development of the GHSL tools;
- Contribute to the combined thematic analysis of GHSL data with other national, regional or global data;
- Support countries in the implementation of the Degree of Urbanisation;
- Contribute to the scientific output and to the knowledge transfer activities through peer reviewed publications as well as by sharing outputs in the Disaster Risk Management Knowledge Centre.

WE LOOK FOR:
The ideal candidate has a university degree (M.Sc. or comparable) in a relevant scientific area (demography, geo/natural sciences, environmental engineering) together with a minimum of 3 years of research experience or a Ph.D in the relevant scientific area.

The following skills are essential:

- Advanced experience in population modelling including population dynamics
- Experience in Geographic Information Systems (GIS) and spatial analysis
- Experience in handling and analysing large-scale spatially distributed datasets
- Good programming skills, in particular Matlab, Python

The candidate should have a proven track record of peer reviewed scientific publications.

Any of the following skills are an advantage:

- Experience in statistical analysis
- Experience in remote sensing
- Experience in machine learning methods

Personal attributes:

- Good communication skills (verbal and written) in English (minimum B2)
- Good interpersonal skills with demonstrated ability to work in a team and be willing to learn and adapt to new tasks
- Ability to work to deadlines and pay attention to detail even under time pressure

INDICATIVE CONTRACT'S DURATION:
36 months initial contract with possible renewals up to maximum 6 years.

PLACE OF WORK:
Ispra (IT)

RULES AND ELIGIBILITY:
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/en/documents/call-expressions-interest-0
or
– (iii) be registered in the specialised call for researchers https://joint-research-centre.ec.europa.eu/working-us/jobs-jrc/temporary-positions/contract-staff-members/function-group-iv/job-opportunities-research-fellows-european-commission_en (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.