



2021-IPR-I3-FGIV-016629

**FG IV – SCIENTIFIC OFFICER – DATA ANALYST
WITH STATISTICIAN PROFILE****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 vacancy is within Directorate for Competences, Text and Data Mining Unit, which aims to develop, provide access to, and apply text and (big) data mining, management and analysis.

The Unit also provides: (i) guidance on the use of statistical methods as well as text mining and analysis techniques for information extraction; (ii) one-stop-shop for tools, services and training for the EU institutions and strategic partners to support their needs in the fields of open sources intelligence, media monitoring, information harvesting and analysis as well as innovation monitoring, statistical data mining and visualisation; (iii) set-up of Competence Centres in these areas as appropriate.

WE PROPOSE:

The vacancy is for a Contract Agent within the Data Analysis and Robust Statistics (DARS) group of the Text and Data Mining Unit. DARS objective is to provide support for the use and uptake of state-of-the-art data analysis and robust statistical methods in the lifecycle of EU policies.

The DARS team has longstanding expertise in data analysis on structured numerical, categorical and textual data, including time series, in the domains of anti-fraud, customs, taxation and international trade. The ambition is to expand in the direction of realistic mathematical and statistical modelling of economic and financial phenomena linked to relevant EU policies, such as environment, health, food and energy. A specific aim of DARS is to foster awareness, answers and tools to address the risks that model misspecification and data anomalies exert on the policy decision making.

The successful candidate will:

- Conduct research and development activities regarding the application of state-of-the-art and novel statistical methods in the projects undertaken by DARS.
- Develop statistical models and methods for large databases containing numerical and categorical variables. The work may also extend to spatial and temporal variables.
- Design and implement algorithms with appropriate scalability and portability properties, for easy deployment in both prototypal and operational environments.
- Collaborate closely with the rest of the DARS team in order to implement data analysis modules that utilize the knowhow in the DARS team in both statistics and machine learning, and are well integrated in the DARS IT ecosystem.
- Contribute to steering the Unit's activities in the general area of data analysis. For this, she/he will adopt an interdisciplinary approach to problems by facilitating the dialogue between the main data analysis cultures (e.g. stochastic data models vs algorithmic models with unknown data mechanism) and by working closely with colleagues specialised in close scientific areas in the Unit and more in general the JRC. These areas may include text mining, big data sources associated with geolocation of entities (e.g. producers/retailers of tobacco), identification of relevant networked structures (nodes expressing individuals and links for their relations/interactions) and detection of manipulated entities (numbers, texts and images).
- Interact and collaborate with colleagues in partner policy DGs. In particular, emphasis is given on the

appropriate presentation of the DARS work and results to policy officers and policy makers.

- Contribute to the scientific output of the group as well as to deliverables of DARS projects.

The candidate will conduct some of these tasks autonomously, but will have a natural team-working attitude. She/he will be asked to acquire good understanding of the role of the JRC within the Commission and how activities of the unit can contribute to policy DGs.

WE LOOK FOR:

The candidate's qualifications and skills will include:

- Solid statistical and mathematical knowledge, preferably covering both robust statistics and network analysis.
- Statistical programming, with preference for MATLAB, R and SAS.
- Good organization skills in order to deliver results on time and with high scientific quality.
- Ability to prioritize tasks, adapt to evolving circumstances, keep contacts within the JRC, with customer DGs, and especially academic partners, to ensure continued high quality of scientific publications.
- Good knowledge of the English language (B2).
- Good communication skills, oral and written.

We evaluate positively:

- An education at PhD level demonstrated by (i) a relevant PhD title, (ii) and/or relevant professional experience after having completed university studies of at least 3 years (Bachelor degree) in disciplines linked to data science, and/or recent scientific publication record in statistical, mathematical and (relevant) computer science journals. Only relevant education/experiences/publications will be considered, which must be on disciplines linked to data science.
- Understanding of machine learning methods and python programming.

INDICATIVE CONTRACT'S DURATION:

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

PLACE OF WORK:

Ispira (IT)

RULES AND ELIGIBILITY:

To be eligible for the position, the candidate must be on a valid EPSO reserve list for Function Group IV contract staff.

You can be added to an EPSO reserve list if you complete successfully an EPSO selection procedure.

Candidates who are on a valid EPSO reserve list or have applied to an EPSO selection procedure can apply to this specific position through <http://recruitment.jrc.ec.europa.eu/?type=AX>.

How to apply to an EPSO selection procedure?

Apply either to the permanent EPSO call (CAST Permanent) https://epso.europa.eu/documents/2240_en or a specialised call for researchers <https://ec.europa.eu/jrc/en/working-with-us/jobs/vacancies/function-group-IV-researchers>

The CAST Permanent reserve list is used by a wide range of organisations (institutions, bodies, offices and agencies of the European Union), whereas the specialised reserve list for researchers (JRC Call COM/1/2015/GFIV – Research) is mainly used by the JRC.

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.