



VACANCY NOTICE – 2023-GEE-E4-FGIV-022369

Project Officer - Scientific Research

Data Scientist - Artificial Intelligence

Type of contract	Member of the European Commission's contract staff, Function Group IV (article 3b of the Conditions of Employment of Other Servants)
Duration of contract	36 months (renewable up to maximum 6 years)
Area	Data Science - Artificial Intelligence-
Place of employment	Geel (BE)
Indicative basic salary	3877,47 - 5616,29 € (applicable as of 1 st of July 2022) For more detailed information please consult: Working Conditions .

WE ARE

The [Joint Research Centre \(JRC\)](#) provides independent, evidence-based knowledge and science, supporting EU policies to positively impact society.

The current vacancy is with the Transport and Border Security Unit of the Directorate for Space, Security and Migration. The Unit has 3 main areas of policy driven research:

- 1) The border security systems research supports the Commission plans towards stronger external borders and improved information exchange. To ensure the security of the EU external Border, it is crucial to understand and address all its different dimensions (Sea, Land, Sky, Cyber) focusing both on people and goods.
- 2) The threat detection & standards for security research develops and provides a variety of test materials, test methods and knowledge transfer to end users in Member States and international organisations. Detection is a key link in the chain of counter-terrorism, and detection technology is often the last line of defence against a terrorist attack.
- 3) The drone and counter drone security living lab provides critical infrastructure stakeholders with scientific advice on how to protect against non-cooperative Unmanned Aircraft Systems (UAS), commonly referred to as drones. As the use of drones, becomes more widespread for commercial use, there is an increased concern that drones will also be used for malicious intent and there currently is no common EU legislation to counter this potential threat.

We work in close collaboration with the respective Commission Directorate Generals Migration & Home Affairs (DG HOME), Mobility and Transport (DG MOVE), Maritime Affairs and Fisheries (DG MARE), Taxation and Customs Union (DG TAXUD), as well as the European Union Aviation Safety Agency (EASA), European Maritime Safety Agency (EMSA), European Border and Coast Guard Agency (Frontex), the Member States



authorities and many other relevant stakeholders. For further information: https://joint-research-centre.ec.europa.eu/scientific-activities-z/border-security_en, https://joint-research-centre.ec.europa.eu/laboratories-and-facilities/explosives-trace-detection-laboratory_en, https://joint-research-centre.ec.europa.eu/scientific-activities-z/aviation-security_en and https://joint-research-centre.ec.europa.eu/scientific-activities-z/drones-counter-drones-and-autonomous-systems_en

We offer a position that gives the opportunity to participate and shape the Commission's policies in the field in line with the [EU Security Union Strategy](#).

WE PROPOSE

The jobholder will carry out research and perform knowledge transfer in support of EU policies, with a strong focus on application of Artificial Intelligence technologies and approaches in the field of detection of security threats.

He/she will do laboratory and fieldwork, support the scientific research in AI, write technical reports and publications on novel techniques in the field of Artificial Intelligence applied to detection of physical security threats, explain the research activities to third parties, such as the policy makers, the scientific communities and the general public.

WE LOOK FOR

We are looking for a highly motivated data scientist, computer scientist or engineer who has competences in novel techniques of Artificial Intelligence to be applied in the field of detection of physical security threats (e.g. drones, robots, visual and audio detection, facial recognition and matching, intelligent perimeter detection, area occupancy, sensor data fusion and decision support systems, chemical/explosives detection, behaviour analysis, etc).

We look for a dynamic person with hands-on experience in the application of Artificial Intelligence algorithms, frameworks and platforms, in particular machine learning including deep learning algorithms. The ideal candidate would have a degree (or a PhD) in data science, computer science or engineering with proven experience of computer science projects relevant for the position.

It is desirable for the candidate to have experience with relevant technologies, for example:

- Programming skills (Python, C),
- Data analysis libraries (numpy, SciPy, Matplotlib, pandas etc.),
- AI/ML libraries (keras, tensorflow, sklearn, pyTorch, etc.),
- Repositories (Git, Github, etc.),
- AI/ML computation optimization tools (e.g. nvidia cuda toolkit),
- AI/ML devices (TPU, nvidia jetson GPU, etc.),
- jupyter and GNU/Linux OS based AI labs.

The job holder should be fluent in written and spoken English (CEFR level B2).



HOW TO APPLY

If you are **already on a valid CAST FG IV reserve list**, or you **have already applied to one of the calls below**, you can directly submit your application at <http://recruitment.jrc.ec.europa.eu/?type=AX>.

If not, before applying to this position, **you must register** for one of the two following calls:

- the [Call for Expressions of Interest | EU Careers \(europa.eu\)](#) (CAST Permanent FG IV), which is used by a wide range of organisations (institutions, bodies, offices and agencies of the European Union), or
- the [specialised call for researchers](#) (JRC Call COM/1/2015/GFIV – Research), which is mainly used by the JRC.

Note that each of the calls above has **different minimum eligibility requirements and different selection tests**.

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