



VACANCY NOTICE – 2023-IPR-T2-FGIV-022429

Project Officer - Artificial Intelligence Researcher

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	Artificial Intelligence
Place of employment	Ispra (IT)
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 Cybersecurity and Digital Technologies Unit - Digital Transformation and Data Directorate, located in Ispra, Italy. The mission of the Unit is to strengthen the trust of the European citizen in a secure and fair digital European society, via scientific research on the application and impact of emerging Information and Communication Technologies on security, privacy and safety.

The unit works on risk mitigation, cybersecurity, cybercrime, digital forensics, and innovative digital technology solutions, and on the associated legal and regulatory frameworks, and supports the continuous development of a vibrant and fair European digital industrial ecosystem.

The successful candidate will contribute to one of the scientific projects of the Unit, namely Cybersecurity, Robustness and Explainability of Artificial Intelligence Technologies (CREATE). This project is focused on the cybersecurity, robustness, interpretability and explainability aspects of Artificial Intelligence (AI), as well as the interactions between AI and cybersecurity including the misuse of AI, the novel applications of AI to cybersecurity, and the impact of 'foundation models' from these perspectives.

The project aims to provide support to several European Commission policy initiatives on Trustworthy AI (including the AI Act and related standardisation work) and produce scientific contributions on these topics.

We offer:

- a job in a dynamic, multidisciplinary working environment, with online collaboration and occasional travel for conferences/workshops and cooperative multidisciplinary work.
- a unique opportunity to contribute to the European approach to Artificial Intelligence (AI), which aims to make the EU a world-class hub for AI and ensure that AI is human-centric and trustworthy.



- family-friendly working conditions, located in a beautiful area of Italy with good international access.

WE PROPOSE

The jobholder will contribute to the activities of the Cybersecurity and Digital Technologies Unit to carry out research in the field of Artificial Intelligence (AI) and cybersecurity, and to provide scientific support to the EU policies on Trustworthy AI and the EU cybersecurity strategy, and to strengthen the European foresight capabilities on these topics.

S/he will conduct scientific studies and experimental activities in the area of artificial intelligence cybersecurity and safety.

The research will be focussed on large-scale AI models, particularly Large Language Models (LLMs), exploring their risks, including cybersecurity, improving their resilience, and developing new approaches for their validation and auditing.

The successful candidate's main tasks will include:

- Design and develop research projects, experimental campaigns and studies in the area of cybersecurity and safety of large scale AI models, particularly Large Language Models, including their potential misuse and broader cybersecurity implications.
- Research novel approaches to increase the resilience of AI models and mitigate cybersecurity and safety risks.
- Conduct state-of-the-art and foresight analysis, and provide scientific policy support on the safety and cybersecurity of large scale AI models.
- Design and implement laboratory experimental activities for the evaluation of machine learning algorithms, including large scale models, for security and safety auditing and validation.
- Prepare scientific papers and technical reports.

WE LOOK FOR

We are looking for an Artificial Intelligence Researcher. S/he shall have a PhD degree - or a minimum of 5 years of full-time research/working experience after the first University degree giving access to doctoral (PhD) studies in the field of: Computer Science, Computer Engineering, Mathematics or equivalent.

Essential skills and requirements:

- Expertise in Artificial Intelligence, specifically in deep learning;
- Good theoretical and practical knowledge in large-scale models, including large language models;
- Solid knowledge and experience in programming with Python and deep learning frameworks;
- Research experience in AI risks, including cybersecurity, robustness and explainability;
- Ability to work in a multilingual and multicultural environment;
- English language, at least C1 level both oral and written;
- Ability to learn new technologies and skills rapidly;
- Capacity to design and develop scientific projects in autonomy;
- Relevant publications in peer-reviewed conferences and journals.



The following knowledge or experience are an asset:

- Experience in running large scale AI models in multi-GPU environments;
- Software engineering skills and DevOps tools;
- Knowledge of privacy and data protection.

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:

- the [Call for Expressions of Interest | EU Careers \(europa.eu\)](http://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.