EUROPEAN SPACE AGENCY

Software Product Assurance Engineer

Job Req ID: 12748
Closing Date: 02 November 2021
Publication: Internal & External
Vacancy Type: Permanent
Date Posted: 05 October 2021

Vacancy in the Directorate of Technology, Engineering and Quality.

ESA is an equal opportunity employer, committed to achieving diversity within the workforce and creating an inclusive working environment. We therefore welcome applications from all qualified candidates irrespective of gender, sexual orientation, ethnicity, beliefs, age, disability or other characteristics. Applications from women are encouraged.

This post is classified A2-A4 on the Coordinated Organisations' salary scale.

Location
ESTEC, Noordwijk, Netherlands

Description
You will be assigned as Software Product Assurance Engineer, in the Software Product Assurance (PA) Section, Quality, Dependability and PA Support Division, Product Assurance and Safety Department, Directorate of Technology, Engineering and Quality.

The Section provides functional support to ESA projects and is responsible for the development, implementation and maintenance of SW PA expertise and standards. It carries out technological research (R&D) in SW PA requirements, techniques, methodologies and tools. It also collaborates on standardisation and training activities.

Duties
You will report to the Head of Section and, within the above technical fields, your main tasks and responsibilities will include:

- Providing expert technical support and consultancy to ESA projects, which includes involvement in projects' major reviews and, where applicable, boards and panels;
- Supporting projects in monitoring contractor SW PA programme execution to ensure compliance with SW PA requirements;
- Preparing and implementing general programmatic and technical SW PA requirements aligned with Agency standards and specifications;
- Establishing project-specific programmatic and technical SW PA requirements based on the ESA PA baseline;
- Supporting projects in evaluating contractor documentation and efforts proposed for the execution of SW PA programmes;
- Supporting projects in monitoring contractor SW PA programme execution to ensure compliance with SW PA requirements;
- Evaluating proposed concepts, designs and operations for compliance with defined SW PA requirements, in order to include the performance of associated audits;

- Defining, initiating and managing R&D activities (SW PA requirements, techniques, methodologies, tools) covering long-/short-term needs;
- Supporting and, at the line management's request, participating in the Directorate's competence domain activities;
- Auditing contractors and their in-house standards for compliance with ESA requirements, assessing the maturity of their software processes;
- Liaising with related engineering and PA specialists regarding overlapping areas of activity;Monitoring applicable scientific/technological trends and maintaining state-of-the-art expertise.

Technical competencies

General background and specific experience in the technical domains covered by the position
Understanding of related technologies, R&D trends and the industrial landscape
Project support experience in a relevant domain
Experience with the application of software product assurance tools and methods
Experience in the management and monitoring of industrial activities, including participation in reviews
Experience with Space Quality Standards and their preparation and implementation

Behavioural competencies

- Result Orientation
- Operational Efficiency
- Fostering Cooperation
- Relationship Management
- Continuous Improvement
- Forward Thinking

Education

A Master's degree in computer science, mathematics or software engineering is required.

Additional requirements

Experience in at least three of the following areas: SW product assurance in critical real-time applications, SW engineering, SW configuration management, dependability assessment of SW intensive systems, SW development and maintenance, SW process assessment and auditing.

Some knowledge in the following areas would be considered an asset for this position:
- Agile practices
- Quality assurance for machine-learning models
- Big data software architectures and life-cycles
- Data quality assurance
- Cyber-security assurance
- Hands-on experience of static code analysis and tools
- Alternative software development life-cycles, continuous integration and tools.

Other information

For behavioural competencies expected from ESA staff in general, please refer to the ESA Competency Framework.

The working languages of the Agency are English and French. A good knowledge of one of these is required. Knowledge of another Member State language would be an asset.

The Agency may require applicants to undergo selection tests.

At the Agency we value diversity and we welcome people with disabilities. Whenever possible, we seek to accommodate individuals with disabilities by providing the necessary support at the workplace. The Human Resources Department can also provide assistance during the recruitment process. If you would like to discuss this further please contact us email contact.human.resources@esa.int.

Please note that applications are only considered from nationals of one of the following States: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, the United Kingdom and Canada, Latvia, Lithuania and Slovenia.

According to the ESA Convention the recruitment of staff must take into account an adequate distribution of posts among nationals of the ESA Member States. When short-listing for an interview, priority will first be given to internal candidates and secondly to external candidates from under-represented Member States.
(https://esamultimedia.esa.int/docs/careers/NationalityTargets.pdf)

In accordance with the European Space Agency's security procedures and as part of the selection process, successful candidates will be required to undergo basic screening before appointment.

Recruitment will normally be at the first grade in the band (A2); however, if the candidate selected has little or no experience, the position may be filled at A1 level.