CO2M System IVV Engineer (Data Processing, Mission control)

Hiring organization
WGS Workgroup Solutions GmbH

Employment Type
Full-time

Date posted
October 26, 2023

Valid through
10.11.2023

Description

To support the development of the CO2M System and the Overall Ground Segment to operate and exploit the CO2M mission, we are looking for a full time Ground Segment and Systems Engineer to join our team and be part of the Engineering and Integration, Verfication &Validation (I,V&V) Service for our customer.

The areas of work cover:

- the Mission Data Processing Sub-segment (MDPS),
- the Mission Control & Operations Sub-segment (MCOS),
- the Overall Ground Segment OGS and System Engineering & I,V&V

The successful candidate will be based at EUMETSAT headquarters in Darmstadt, Germany, providing service in the field of system engineering. A high percentage of off-site location is also possible.

Responsibilities

The Candidate shall contribute to activities related to (either or)

1. the Engineering and I,V&V of the Mission Data Processing Sub-segment (MDPS):

- CFDP Front End Processor and File Re-constructor (CFDP FEP)
- Payload Data Processing (PDP)
- Scientific SW-Lib
- Instrument Processing Facilities (IPFs)

2.the Engineering and I,V&V of the Mission Control and Operations Sub-Segment (MCOS)

- Flight Dynamics Subsystem (FDS)
- Mission Planning Subsystem (MPS)
- Mission Control Subsystem (MCS)
- Operations Preparation Subsystem (OPSPREP Tools)
- Satellite Simulator (SIMSAT)

3. the I,V&V of the System & Overall Ground Segment

Skills and Experience

The Key Person shall have the following experience and background:

- University degree in a relevant discipline (Aerospace, Aeronautics, Telecommunications engineering, Software, System or Computer Sciences, etc.).
- At least 3 years' experience in Systems Engineering and IV&V related

activities for at least one major element of a ground segment for earth observation missions

- At least 3 years' proven experience in the integration, verification and validation (IV&V) of data processing systems and/or processors, including generation of test plan, test specification, procedures and test reports for end-to-end processing chains
- Knowledge of space and ground system engineering processes, and system and software life-cycles and standards
- Knowledge of ECSS standards
- Experience in change control procedures
- Experience in writing technical requirements
- Definition, management and traceability of requirements structure with the support of dedicated tools (e.g. DOORS)
- Experience in interface management and definition, including familiarity with mechanisms and tools for detailed interface definition and capability to prepare and manage ICD
- Experience with formal testing (FAT/OSAT), including preparation of test procedures, TRRs/TRBs
- Experience of automatic testing environments and test automation to support Integration, Verification and Validation of Ground Segments
- Experience in formal verification control processes (VCBs) and maintenance of VCDs
- Use of modelling and design languages for System Engineering (e.g. SysML) and tools in support of architectural design activities (e.g. Enterprise Architect).
- Ability to write accurate and consistent technical documentation
- High degree of working autonomy
- Problem solving
- Good analytical skills
- High degree of interpersonal awareness
- Experience in working as part of a multicultural team
- Fluency in English (spoken and written)

The following experience would be additional assets:

- Experience in operational environments under strict configuration management rules
- Knowledge of Development and maintenance of operational procedures and/or configuration data
- Knowledge of Spacecraft and/or ground segment operations
- Experience with Data Processing systems for earth observation missions
- Knowledge of and/or experience of quality control, calibration and validation.
- Experience with Satellite Mission Control systems for earth observation missions
- Experience with Ground Stations and/or EUMETSAT Multi-Mission Elements for archiving, monitoring, data dissemination
- Knowledge of scripting
- Experience with ground segment test data, including reconditioning, change control, and related test tools
- Knowledge of CO2M Payload Data, Generic Product Format Specification (Level 0-1-2) and test harness
- Knowledge of IT/ground segment technologies: relational databases, virtualisation, networking, SW deployment tools, etc.
- Demonstrated experience with UNIX/Linux operating systems
- Knowledge of programming languages (e.g. C/C++, Java and IDL)

Contact

Interested applicants should submit their CV and Cover Letter in **Word** (*.docx) or in **PDF** (*.pdf) format from the website or by emailing the WGS recruitment team at ***vacancies@workgroup-solutions.com*** before **10.11.2023**