Training Opportunity for Portuguese Trainees

Reference	Title	Duty Station
PT-2016-HSO-GI	Software Engineering	ESOC

Overview of the Unit missions:

The Data Systems Infrastructure Division (HSO-GI) is in charge of developing and maintaining all software applications for the operation infrastructure (in other words, all the software that is not mission-specific). This spans from the SCOS (Spacecraft Operating System), to the Simulators, to the software for the ESA ground Stations. HSO-GI is also in charge of defining and maintaining the software development environment for the infrastructure, as well as the test and validation infrastructure.

Overview of the field of activity proposed:

The trainee will be involved in one of the technical tasks describe below:

• Development, Acceptance and Maintenance of generic ground data systems deployed as the basis for mission operations centres. This includes a large variety of applications supporting the preparation, planning, simulation, execution and evaluation of mission operations.
• Create competences in SCOS 2000, for Mission Control Systems and GSTVi (Ground System Test and Validation Infrastructure)
• Activities related to the European Ground Systems Common Core (EGS-CC) which is a strategic initiative between ESA, national Agencies and industry. The objective is to define and develop a common infrastructure which can be used as the basis for both EGSE and Mission Control Systems and facilitate reuse and interoperability across mission phases, and in particular between spacecraft AIT and mission operations.The trainee will be involved in the investigation of new technologies..
• Automated Ground Testing: By the complexity of the Ground Segment Systems, it is necessary to test current infrastructure on realistic mission environment. Current test environment are using simplistic test beds, which are way out from a mission environment.

Required Education:

The applicant shall have a solid back-ground in software engineering and be able to quickly learn and apply new software technologies. Knowledge on component based and distributed architectures (Component frameworks, SOA, etc), data persistence, scripting and Eclipse related technologies (OSGi, EMF,etc) is preferable.

Experience of the Java platform and Linux is required.