Training Opportunity for Portuguese Trainees

Reference	Title	Duty Station
PT-2016-TEC-SWG	**Software Engineer Functional Verification**	**ESTEC**

Overview of the Division missions:

The domain of Software Systems covers most aspects of the software in the service of ESA space missions. In particular it covers:
- software engineering methods and tools;
- software technology for onboard and ground systems
- software architectures and building blocks;
- system-software co-engineering techniques in which computer code is specified in a concurrent way together with the system;
- real-time software embedded in spacecraft systems and payloads;
- ground facilities software, including electrical ground support equipment, test benches, databases and simulation and modelling tools;
- verification and validation techniques for checking mission-critical software
- software standards

Overview of the field of activity proposed:

The proposed opportunity consists in supporting research and development activities in the Functional Verification domain. Such an activity can include internal developments, where the methods, tools or prototypes have to be developed or integrated within ESTEC or external developments, activities related to monitoring industry in developments specified by ESTEC in Statement Of Works.

Specifically support is required for activities related to software maintenance and future development of the Avionic Test Bench (ATB) and EGSE (Electrical Ground Support Equipment Support) Reference Facility.

The opportunity is to get familiarized with Functional Verification and its use in space systems.
Hands-on experience can be acquired with state-of-the-art methods and tools.
The possibility exist to see the application in several ongoing ESA projects.

Required Education:

Applicants should have just completed, or be in their final year of a University course at Masters level in software engineering. A strong interest in research topics related to Functional Verification methods, techniques and tools is preferred.
Software practical experience: real-time software, Object Oriented design methods, databases, compilers, UML, XML, Corba, Linux, Windows and programming languages such as C, C++, Tcl/Tk, Java.

Candidates must be fluent in English or French, the official languages of the Agency.

Candidates should have good interpersonal and communication skills and should be able to work in a multi-cultural environment, both independently and as part of a team