Training Opportunity for Portuguese Trainees

Reference	Title	Duty Station
PT-2017-OPS-OSA(2)	**Web Technology for Space**	**ESOC**

Overview of the Unit missions:

The Advanced Mission Concepts Section (OPS-OSA) is entrusted with three activity groups:
a) investigation and promotion of innovative operations concepts
b) exploration and exploitation of advanced technology for ESOC's core business in space and ground operations (e.g. monitoring, diagnosis, planning & scheduling)
c) coordination and undertaking of ground segment preparation and operations implementation for special projects.

The section's advanced operations technology prototyping activity is supported by a Research & Development computer facility, which allows hands-on work.

Overview of the field of activity proposed:

The main activities proposed would involve the design and development of advanced web based software tools for the support of spacecraft mission teams at ESOC. The candidate will be involved in the prototyping and development process of one or more of the following applications:

• Interactive dashboard visualization tool implementation
• Visual, interactive tool for knowledge engineering and the management of planning domains
• Web-based graphical plotting of time series data
• Responsive web client for the monitoring of spacecraft data

The proposed traineeship would involve close collaboration with ESOC mission teams for requirements elicitation prior to the development of the software prototypes. Technical coordination & support and coaching will be provided by on site individual project leaders.

Required Education:

Applicants must have recently attained their degree or be close to successfully completing their studies in Computer Science.
Required skills:
• Good Java software development skills (with Python language knowledge as a plus)
• Good Web services architecture and protocols knowledge (e.g. REST)
• Experience in web application development (e.g. JavaScript, Angular JS, etc.)
• Experience with Data Representation JavaScript libraries (e.g. D3.js)
• Knowledge on virtual/augmented reality domains is a plus