

## Training Opportunity for Portuguese Trainees

Reference	Title	Duty Station
PT-2016-HSO-OSA	Artificial Intelligence and Web Technology for Space	ESOC
<p><b><u>Overview of the Unit missions:</u></b></p> <p>The Advanced Mission Concepts Office (HSO-OSA) is entrusted with three activity groups:</p> <ol style="list-style-type: none"> <li>a) investigation and promotion of innovative operations concepts</li> <li>b) exploration and exploitation of new control technology for ESOC's core business in space and ground control (e.g. monitoring, diagnosis, planning &amp; scheduling)</li> <li>c) coordination and undertaking of ground segment preparation and operations implementation for special projects.</li> </ol> <p>The office's control technology prototyping activity is supported by a Research &amp; Development computer facility, which allows hands-on work.</p>		
<p><b><u>Overview of the field of activity proposed:</u></b></p> <p>The main activities proposed would involve the design and development of advanced java tools and web based software prototypes 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:</p> <ul style="list-style-type: none"> <li>• Visual, interactive tool for knowledge engineering and the management of planning domains</li> <li>• Web-based graphical plotting of time series data</li> <li>• Mobile web client for the monitoring of spacecraft data</li> <li>• Monitoring and diagnosis tools with advanced algorithms</li> <li>• Virtual 3D spacecraft model for monitoring spacecraft subsystems</li> </ul> <p>The proposed traineeship would involve close collaboration with ESOC mission teams for requirements elicitation prior to the development of the software prototypes. Technical coordination &amp; support and coaching will be provided by on site individual project leaders.</p>		
<p><b><u>Required Education:</u></b></p> <p>Applicants must have recently attained their degree or be close to successfully completing their studies in Computer Science.</p> <p>Required skills:</p> <ul style="list-style-type: none"> <li>• Good Java software development skills</li> <li>• Experience in web application development</li> <li>• Knowledge of artificial intelligence and virtual/augmented reality techniques is a plus</li> </ul>		