

Training Opportunity for Portuguese Trainees

Reference	Specialist Area	Duty Station
PT-2012-HSO-OSC	Data Mining	ESOC
<p><u>Overview of the Division missions:</u></p> <p>The Studies and Special Projects Division (HSO-OSC) is entrusted with four activity groups:</p> <ul style="list-style-type: none"> a) pre-phase B studies for future space missions of ESA Programme Directorates and for external customers, b) investigation and promotion of innovative operations concepts and exploitation of new control technology for ESOC's core business in space and ground control c) coordination and undertaking of ground segment preparation and operations implementation for special projects. d) Exploitation of ESOC's spare capacity for support of 3rd party space activities. <p>The division's control technology exploitation activity is supported by a Research & Development computer facility, which allows hands-on work.</p>		
<p><u>Overview of the field of activity proposed:</u></p> <p>The field of activity offered to interested and motivated candidates within the Advanced Mission Concepts & Technologies Office, includes:</p> <ul style="list-style-type: none"> • Statistic analysis, probability analysis, data mining, data characterization • Time-series analysis : Automatic detection of anomalous behaviour and forecast • Compression algorithms (both lossy and loss-less) • Validation of advanced monitoring and control concepts and associated prototypes recently developed; • Survey, analysis and preliminary assessment of new technologies suitable to support the implementation of specific future mission's operations concept and functional requirements in the area of monitoring and diagnostics; <p>Team spirit, pro-active attitude and enthusiasm are among the qualities of the offered working environment.</p>		
<p><u>Required Education:</u></p> <p>Candidates should have a University degree (e.g. in Computer Science, Electrical Engineering, Aeronautic or a degree in Physics) with preferably an academic knowledge of system analysis and of, at least, one of the following artificial intelligence technology branches: machine learning, data mining & fusion, data stream mining, time-series analysis.</p> <p>Working knowledge of JAVA and of object oriented programming technique is required.</p>		

Contact point:
 Alessandro Donati
 HSO-OSC Adv. Mission Concept & Technologies Office
 +49 6151 90 2574
 Alessandro.Donati@esa.int