

Intern in EAC in the Space Training Team, CAVES and PANGAEA 2/2 (On-Site or Remote)

Job Req ID: 12561
Closing Date: 25 June 2021
Publication: External Only
Vacancy Type: Intern
Date Posted: 28 May 2021

ESA is an equal opportunity employer, committed to achieving diversity within the workforce and creating an inclusive working environment. Applications from women are encouraged.

Location

EAC, Porz-Wahn, Germany

Our team and mission

The CAVES and PANGAEA team specialises in training programmes that equip astronauts and mission developers with scientific, expeditionary and behavioural skills. The group's primary output is focused around two training programmes, CAVES, a course that uses natural cave systems for expeditionary and human behavioural and performance training, and PANGAEA, a course for geological and astrobiological field training. Complementary to their training goals, these programmes are used as research and development platforms to advance several of ESA's technological, scientific and operational areas.

Interested candidates are encouraged to visit the ESA website: www.esa.int/ESA

Field(s) of activity/research for the traineeship

As this opportunity for interns (students in their ultimate/penultimate year of their Masters) is opened at department level, it proposes you a choice of activities/topics for internships/learning areas in which an internship can be undertaken.

Topic 1: Electronic Fieldbook (EFB) system development.

The EFB is a tool supporting astronaut mission operations with technology for geolocation, cave mapping, scientific data gathering, sensors interaction and wireless data relay to mission control centres. Interns are sought to support the software or hardware development of this exploration tool to improve, extend and test its functionalities.

For detailed information on this internship position, please click here: https://www.esa.int/About_Us/EAC/Space_training_team_Electronic_Field_Book_development

Behavioural competencies

Result Orientation
Operational Efficiency
Fostering Cooperation
Relationship Management
Continuous Improvement
Forward Thinking

Education

You must have student status and be enrolled at university for the entire duration of the internship. You should preferably be in your final or second to last year of a University course at Masters level in a technical or scientific discipline.

Additional requirements

The working languages of the Agency are English and French. A good knowledge of one of these is required. Knowledge of another Member State language would be an asset.

The topics listed above respectively require such educational knowledge as:

Topic 1:

Depending on the chosen branch and profile (either software or hardware):

- Software development: academic or professional experience with at least one of the programming languages, frameworks or engines currently used in the project: JavaScript, AngularJS, Java, CouchDB, HTML, Ionic, Cordova. Experience on one or more of the following paradigms would be considered a plus: C++, C#, UWP, Python, REST, TensorFlow, Docker, user interface design.
- Hardware, telecommunications, and prototyping: academic or professional experience in UNIX embedded boards or generic electronics (e.g. RaspberryPi, ESP32, Arduino), as well as having basics of OpenWRT, Wi-Fi and of routing and networking. Experience in hardware assembling and CAD 3D prototyping-printing would be a plus.

Other information

For behavioural competencies expected from ESA staff in general, please refer to the [ESA Competency Framework](#).

If you require support with your application due to a disability, please email contact.human.resources@esa.int.

Please note that applications are only considered from nationals of one of the following States: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, and the United Kingdom. Nationals from Latvia and Slovenia, as Associate Member States, or Canada as a Cooperating State, can apply as well as those from Bulgaria, Cyprus, Lithuania and Slovakia as European Cooperating States (ECS).