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Announcement for a research associate position
at the German Aerospace Center (DLR)

Methodological, algorithm and processing chain development for analysis of multi- and hyperspectral image data

Qualification: Software Developer / Engineer, Geomatics scientist
Start: immediate
Duration: 3 years
Affiliation: German Aerospace Center, Germany (Oberpfaffenhofen, near Munich)
Institution: German Remote Sensing Data Center (DFD), Land Surface Department (LAX), Spectroscopy and Land Degradation Team

Your Mission:
One of the mandates of the DFD is the development of operational processing chains for geoscientific information products using airborne and spaceborne Earth Observation data. In addition to the large multispectral archives such as the Landsat and Sentinel missions, operational data products of space borne hyperspectral satellite missions such as EnMAP will be available. Your mission will be to configure and develop software tools for end-to-end algorithms including prototyping of data products based on Algorithmic Theoretical Baseline Documents (ATBDs) and similar descriptions, developing suitable software architectural designs, specifying interfaces, defining software and hardware resources, describing and executing test, verification and validation assemblies and developing software suitable for high performance platforms. The data products are developed in the biodiversity and land degradation context. You are working in a scientific environment in close collaboration with national and international experts, you are integrated into an experienced team and you will be developing sustainable solutions in an international project framework.
The work will include the presentation of project results at internal, national and international conference as well as in the form of peer-reviewed publications.

Your Qualification:
- University degree in Computer Science, Geomatics or equivalent
- Excellent programming skills and experiences in one or more of the following languages (e.g. C/C++, Python, IDL, R, etc.)
- Profound knowledge in the development of processing chains
- Experiences in generic software engineering (object-oriented programing, design patterns, unit testing, parallel programming, big data, etc.)
- Test-driven Development, Refactoring of Legacy Code
- Good knowledge in remote sensing, specifically processing of optical (hyperspectral and multispectral) image data, knowledge of vegetation and soil spectroscopy is a plus
- Very good knowledge of English
- Communication skills, high commitment and teamwork

Your benefits:
You can look forward to a fulfilling job with an employer who appreciates your commitment and promotes your personal and professional development through various on-site training and qualification opportunities. Our unique infrastructure offers you a working environment in which you have unparalled scope to develop your creative ideas and accomplish your professional objectives. We are striving to increase the proportion of female employees. Disabled applicants with equivalent qualifications will be given preferential treatment.

Contacts:
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