The research group Climate and Environmental Remote Sensing of the Department of Geodesy and Geoinformation of TU Wien is seeking a motivated

Data processing specialist in microwave remote sensing (m/f)

The Climate and Environmental Remote Sensing group (http://climers.geo.tuwien.ac.at/) develops long-term remote sensing datasets of soil moisture and vegetation and uses them to address pressing climatological and environmental issues. We work closely together with the Microwave Remote Sensing group (http://rs.geo.tuwien.ac.at/), one of the world leading groups in the retrieval of soil moisture and land surface characteristics from active microwave remote sensing. Together we employ about 40 staff members currently working on approximately 25 projects supported by various national, European and international programs, grants and funding sources.

To support the research work of our team, we are looking for a skilled microwave remote sensing data processing specialist with a background or interest in geospatial sciences. The candidate will particularly support our activities within ESA’s Climate change Initiative for Soil Moisture (http://www.esa-soilmoisture-cci.org/), the Copernicus Climate Change Service (C3S; http://climate.copernicus.eu/) and the Validation Service QA4SM (https://qa4sm.eodc.eu/) and will have the possibility to enroll in the PhD program of TU Wien.

Your Responsibilities:

- Processing and analysis of remote sensing data (soil moisture, vegetation variables, and similar) from passive and active microwave data
- Developing scientific algorithms in the fields of microwave remote sensing, image processing, time series analysis
- Self-sufficient software development using Python
- Prototyping, implementing, and testing of processing chains and generation of value-added soil moisture products
- Validation of long-term microwave remote sensing datasets using in-situ and modelled datasets
- Documentation and version control of software using git
- Writing technical documents, project reports and scientific journal papers

Your Profile:

- Master (or equivalent) degree OR PhD degree in informatics, geoinformation sciences, geodesy, physical geography, mathematics, or similar
- Excellent programming skills (especially Python)
- Experience in remote sensing data processing and derivation of geophysical parameters (e.g. soil moisture, vegetation, snow and ice, …)
- Strong analytical and technical skills and problem solving capability
- Solid knowledge of statistical methods for temporal and spatial analysis of scientific data
• Interest in geospatial sciences in particular the use of remote sensing for hydrological applications
• Software control expertise using git
• Use of command line linux
• Proven expertise through published scientific articles and / or software is a distinct advantage
• Experience of developing data processing algorithms in either spatial applications (or another context) is desirable
• Good written and spoken communication skills in English

We Offer:

• The opportunity to work in an innovative, motivated and successful team
• Flexible working hours
• Workplace close to city center of Vienna
• Possibility to enroll in the PhD program of TU Wien
• The extent of the employment is negotiable between 30 and 40 hours per week
• The salary is based on the Austrian regulations for university staff. The monthly minimum salary for full-time employment (40 hrs/week) is € 2.864,50 for a Pre-Doc and € 3.803,90 for a Post-Doc position, respectively. The monthly salary is paid 14 times per year.
• Envisaged start date is June 1st, 2019 and will be time-limited; the duration is subject of negotiation.

If this job opportunity fits your career development plans, we are looking forward to receiving your application in English (cover letter, CV, relevant publications and references) and in one single PDF file via e-mail to rs-sek@geo.tuwien.ac.at

Candidate selection will start on May 1st, 2019 and will continue until a suitable candidate is found. TU Wien will not refund any cost occurred in the course of an application.

For further information, please contact Prof. Wouter Dorigo at wouter.dorigo@tuwien.ac.at.