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

Project Assistant in microwave remote sensing (f/m/d) on the topic of

Microwave remote sensing applications

Reliable soil moisture and vegetation state estimates are an essential source of data for various research fields and applications, such as climate modelling, agricultural monitoring and flood and drought prediction. Microwave observations enable monitoring of the land surface at different spatial and temporal scales and are used to retrieve long-term datasets on soil moisture and vegetation status for decades. Nonetheless, using these datasets for hydrological applications such as drought monitoring is still in its early stages. The Remote Sensing group of TU Wien conducts theoretical and applied research to improve the retrieval of soil moisture and land surface characteristics from active microwave remote sensing observations and use these to better understand and monitor land surface processes and interactions at different temporal and spatial scales. The Remote Sensing group is at the forefront of microwave remote sensing of land surface variables and consists of PhD's, Post-Doc's and senior scientists led by Prof. Dr. Wolfgang Wagner.

To support the research work of our team, we are looking for a Project Assistant with a strong background in Earth Sciences and technological interest to support our activities in the field of microwave remote sensing of soil moisture and vegetation. The selected candidate will be working on validation and application of active microwave Metop ASCAT and Sentinel-1 data for flood and drought risk and vegetation monitoring. Working with high resolution Sentinel-1 data includes big data analysis and working in a high-performance computing environment.

Your responsibilities:

- Validation and application of remote sensing data in the fields of flood and drought risk monitoring
- Contribution in software development using object-oriented programming language
- Generation and testing of value-added products for applications
- Writing technical documents, project reports and scientific journal papers

Your skills

- Master degree in earth sciences, environmental sciences, information sciences, geodesy, geoinformation sciences, physics, or similar
- Experience in (microwave) remote sensing and derivation of geophysical parameters from
- remote sensing observations (e.g. soil moisture, water bodies, vegetation, snow and ice, …)
- Excellent programming skills (preferably Python)
- Strong analytical and technical skills and problem-solving capability
- Good written and spoken communication skills in English

We Offer

- The opportunity to work in an innovative, dynamic and successful team
- A stimulating and friendly working environment at the department
- Possibility to enrol in the PhD program of TU Wien and further develop and learn
- Freedom to discuss and implement your own ideas
- Flexible working hours
- Workplace close to city centre, metro and main train station and ample outdoor opportunities in the vicinity of Vienna

The salary for this position is based on the Austrian regulations for university staff. The monthly minimum gross salary ranges between € 1.105,10 (BSc level) for a 20 h/week employment and € 3058,60 (MSc level) for a 40h/week employment. The monthly salary is paid 14 times per year.

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 July 24th, 2022** and will continue until a suitable candidate is found. TU Wien will not refund any cost occurred in the course of an application.

Prof. Dr. Wolfgang Wagner
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