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

Project Assistant in microwave remote sensing (f/m)

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. The **Microwave Remote Sensing group** 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 land surface processes and interactions at different temporal and spatial scales. The **Microwave 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 technological interest to support our activities in the field of **microwave remote sensing of soil moisture and vegetation**. The selected candidate will be responsible for improving existing soil moisture and vegetation algorithms especially focusing on high resolution retrievals from Sentinel-1 backscatter observations. Working with high resolution Sentinel-1 data includes big data analysis and working in a high-performance computing environment.

Your responsibilities:

- Developing scientific algorithms in the fields of radar remote sensing
- Contribution in software development using object-oriented programming language
- Prototyping, implementing, and testing of processing chains and generation of value-added products
- 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 € 1.706,90 (MSc level) for a 25 h/week employment and € 2.731,00 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 **September 24th, 2020** and will continue until a suitable candidate is found. TU Wien will not refund any cost occurred in the course of an application.