

Postdoctoral Researcher position in Pedometrics

The Chair of Soil Science and Geomorphology is offering a three-year PostDoc position (full time for three years). Within the DFG-funded (German Research Foundation) project MLTRANS The candidate (m/w/d) will analyze complex interactions of soils and environment and how they can be modeled using machine learning. Main research question is about the causality and transferability of machine learning models in soil science. The research work in this project is focusing on soil landscape modeling including data analysis and spatial modelling of soil functions and properties using data sets from Europe, Germany and Iran.

Your responsibilities are:

- Research on the application of machine learning for soil function and soil property mapping
- Develop novel machine learning methods to extrapolate soil information
- Documentation and publication of results in international peer reviewed journals
- Presentation of results at national and international scientific meetings
- Contribution to the teaching activities of the group to a limited extent

We expect:

- Completed PhD in Soil Science, Geoinformatics, Remote Sensing, Agriculture, Geosciences, Environmental Sciences, or other closely related disciplines
- · A research interest in the application of machine learning in soil science
- · Expertise in spatial statistical analysis and big data modeling
- · Experience in remote sensing of soil property
- Experience in programming (R and/or Python) and GIS software (QGIS)
- · Very good communication skills (oral and written) in English

We offer

- An excellent, interdisciplinary and dynamic research environment in an international team (http://www.uni-tuebingen.de/soilscience) and a vibrant city (https://www.tuebingen.de/en/)
- Close collaboration with the Tübingen cluster of excellence 'Machine Learning for Science'
 (http://www.machinelearningforscience.de) and the Collaborative Research Center
 'ResouceCultures' (SFB1070) including interesting career opportunities and an extensive range of
 training and further education courses

The appointment will be limited to **December 2024 (36 month)**. Work place is Tübingen. Salary will be according to the German public service (TVL E13, 100 %). In case of equal qualification and experience physically challenged applicants are given preference. The University of Tübingen aims to increase the share of women in research and encourage female scientists to apply. For more information contact Dr. Ruhollah Taghizadeh (ruhollah.taghizadeh-mehrjardi@mnf.uni-tuebingen.de). Please send your application (one pdf-formatted document) with detailed curriculum vitae, and statement of research interests, certificates/transcripts before **22 November 2021** to Margaretha Baur (margaretha.baur@uni-tuebingen.de).