UNIVERSITÄT LEIPZIG

Project Scientist position in the field of atmosphere biodiversity interaction: Machine learning for insect detection from 2D precipitation sensor data (m/f/d)

Founded in 1409, Leipzig University (UL) is one of Germany's largest universities and a leader in research and medical training. With around 30,000 students and more than 5000 members of staff across 14 faculties, it is at the heart of the vibrant and outward-looking city of Leipzig. Leipzig is a vibrant hotspot for creativity in central Germany, known for its world-class research in atmospheric science, remote sensing, and biodiversity research.

The Leipzig Institute for Meteorology (LIM, https://www.physgeo.uni-leipzig.de/en/institute-for-meteorology) at the Faculty of Physics and Earth Sciences seeks to fill the above position at the earliest opportunity funded by the Saxon State Ministry for Science, Culture and Tourism (pending final formalities).

Terms of employment
- Fixed term position for 1.5 years (66% of full-time) **or**
- Fixed term position for 1 year (100 % of full-time)
- Planned remuneration: salary group E13 TV-L

Duties

Independent research as part of an interdisciplinary team in the drOPS (clouD and pRecipitation Observations for Process Studies) of LIM and in collaboration with colleagues in meteorology and biodiversity science

- Development of techniques to retrieve insect number concentration and insect taxonomical types from 3D precipitation sensor observations with machine learning.
- Analyze insect occurrence in dependence on meteorological parameters
- Write high-quality research articles for high-impact journals, book chapters, and reviews
- Present scientific results at conferences
- Provide academic supervision for research students

Requirements
- PhD degree in data science, atmospheric science, biology, or a related topic
- Interest in interdisciplinary collaboration (specifically meteorology and biodiversity science)
- Very good command of data analysis and programming languages (e.g., Python, Matlab)
- Excellent English language skills
- Experience in image processing or machine learning would be advantageous

sample insect measurements of the precipitation sensor

The position is open until filled, review of the applications will start on Feb 6th. Specific questions should be addressed to Dr. Maximilian Maahn (maximilian.maahn@uni-leipzig.de). Please send your application with the usual documents (CV, list of publications, certificates, motivation letter, contact information of two referees) as a single PDF file to **maximilian.maahn@uni-leipzig.de.** Please note that it is not possible to guarantee confidentiality when communicating by unencrypted email. We kindly request that you submit copies only, as we are unable to return application documents.

The selection for the position will be based solely on scientific merit without regard to gender, religion, national origin, political affiliation, marital or family status or other differences. Among equally qualified candidates, handicapped candidates will be given preference.