You are a highly motivated person who loves spatial data science? You want to use your expertise for the benefit of society and the environment – in particular stimulating Climate Action? You want to improve the availability and quality of geographic information for Climate Action and develop geoinformatics methods used for related open, non-profit applications? Then we actually might have a suitable and interesting job for you!

Senior Spatial Data Scientist for Climate Action *(m/f/d, up to 100%)*

HeiGIT gGmbH is a non-profit start-up aiming at technology transfer and applied research in the area of geoinformatics for the benefit of society and the environment. We work towards closing the gap between knowledge about climate change and action towards mitigating it. To this end, HeiGIT is establishing a new dedicated focus area on Climate Action.

To work with us on Climate Action topics, such as creating high-resolution spatial indicators of climate change readiness and greenhouse gas emission maps, we are looking for a highly motivated and experienced Spatial Data Scientist.

Your tasks are related to generate spatial sustainability and climate change readiness indicators or greenhouse gas emission estimates in a very high spatial resolution. Depending on your experience this includes

- Conceptualization and implementation of bespoke spatial indicators
- Analysis of crowdsourced geodata like OpenStreetMap (OSM) in combination with other spatial data like remote sensing, government data, social media data and citizen science data
- Use of advanced machine learning methods to enrich the datasets
- Data fusion of the above mentioned data sources
- Data engineering and management
- Validation and estimation of data quality and uncertainty
- Support communication and visualization of the results by co-developing an open source platform providing web and mobile applications

Close collaboration and communication with team members & stakeholders is your favorite way of working. Your in-depth knowledge of your favorite language and tools will be valued, but you'll also be expected to help with whatever the team needs to work towards its goal.

Your Expertise

- PhD and an above-average university degree in one of the subjects such as Geoinformatics, Geography, Environmental Studies, Environmental Physics or similar.
- Experience in environmental modelling and / or domain specific knowledge related to Climate Change or Climate Action and Sustainability.
- Knowledge on volunteered geographic information (VGI), especially OpenStreetMap (OSM), is an advantage.
- Excellent & demonstrated broad methodological skills & research experience in topics such as Spatial Data Science & Machine Learning.
- Hands on experience in evaluating and developing new approaches from literature and actively implementing new concepts.
- Solid Computer Science and programming skills (e.g. Python, Java or R). Experience in collaborative development (e.g. git) or working with data base systems is beneficial.
- Excellent communication and collaboration skills.
- German language skills preferred, but English only possible.

We offer

an attractive position in an interdisciplinary team in a highly dynamic and growing area with real world impact on society and the environment.

HeiGIT gGmbH is cooperating closely with the GIScience Research Group at Heidelberg University, which is member of the Interdisciplinary Center for Scientific Computing (IWR) and funding member the Heidelberg Center for the Environment (HCE) at Heidelberg University. We offer a stimulating interdisciplinary research environment with many personal development opportunities. All HeiGIT employees can, in agreement with the rest of the team, work remote up to half of their time. HeiGIT receives core funding by the Klaus Tschira Foundation (KTS).

The position is to be filled as soon as possible and for administrative reasons initially limited to 5 years - with the option of sustainable extension. Please send your application including CV, certificates, references, etc. in digital form as PDF as soon as possible to maria.martin@heigit.org.

Please note our data protection information (https://heigit.org/privacy-policy/data-protection-information-for-applicants/) for applicants.