

Job advertisement HeiGIT gGmbH

You want to use your machine learning expertise for the benefit of society and the environment? You want to improve the availability and quality of geospatial data and further develop geoinformatics methods used for open, non-profit applications in the field of sustainability, mobility and humanitarian aid? That's our mission, too!

HeiGIT gGmbH is a research-oriented, non-profit start-up with the goals of technology transfer and applied research in the field of geoinformatics, especially in areas such as humanitarian aid or other non-profit goals for the benefit of society and the environment. Application examples include humanitarian aid and disaster management, sustainable mobility or applications and data products to support sustainability and climate action. To strengthen our core competency in Machine Learning, esp. Deep Learning and Spatial Data Science, we are looking as soon as possible for a

Lead: Geo Machine Learning for Good

Senior Spatial Data Science Expert (m, f, d), 100%, permanent position

Your tasks will lie in the cross-departmental further development and establishment of the increased use of advanced Machine Learning and Data Science methods in all groups and subject areas of HeiGIT gGmbH. These are intended to enhance or enable HeiGIT's open, non-profit applications and new innovative data products for the benefit of society or the environment. The focus will be on the following topics and tasks:

- Generation of large-scale, high-resolution free geodata products for applications in areas such as humanitarian aid, disaster management, health care, sustainable mobility, nature and climate protection (e.g. climate change mitigation & adaptation)
- Quality assessment of the geospatial data used for this purpose and of the resulting data products
- Innovative use of advanced machine learning methods (supporting the initiation of new projects and relevant data products, towards "actionable data")
- Data fusion of heterogeneous data sources for geoinformation
- Development of powerful Big Spatial Data algorithms, methods and GI web services, especially for the analysis and data enrichment of heterogeneous global geodata sets
- Initiation and monitoring of corresponding research projects
- Coaching the team
- Considering potential bias, ethical use and FAIR principles in machine learning and data science and their applications

We expect:

- a team-oriented, highly motivated Senior Scientist with
- distinctive experience of several years in the use and further development of methods from the fields of Machine Learning, Deep Learning and Spatial Data Science in relation to geodata.
- Knowledge especially of user-generated geospatial data such as OpenStreetMap (OSM), social media, citizen science data, or open government data in one or more of the above application domains for the benefit of society and the environment.
- Experience in interdisciplinary project management (national, international)
- ideally leadership experience
- An above average university degree or PhD in one of the subjects such as geoinformatics, computer science, geography, mathematics, physics or similar,
- interest in working at the interface between science and practical requirements with implementations for different user groups (e.g. requirements of aid organizations, environmental organizations, government agencies & citizens etc.)
- German language skills preferred, but "English only" also possible
- Excellent communication and presentation skills

We offer

an attractive, permanent senior position (up to 100%) in an interdisciplinary team interfacing research and social real-world impact in a highly dynamic and growing field, supporting action towards a better society and environment. As an affiliated institute of Heidelberg University, HeiGIT gGmbH works closely with the GIScience Research Group of Heidelberg University, which is a member of the Interdisciplinary Center for Scientific Computing (IWR) and the Heidelberg Center for the Environment (HCE) of Heidelberg University. We offer a stimulating interdisciplinary research environment with many opportunities for personal development in one of the most livable cities in Germany. HeiGIT receives core funding from the Klaus Tschira Foundation (KTS), Heidelberg.

The position is to be filled **permanently as soon as possible**. Please send your meaningful application with CV, certificates, references, etc. as soon as possible - **ideally by 31.01.2022** - digitally to stefan.gumbrich@heigit.org.

We are looking forward to your application!

You may also want to check our other current job announcements at HeiGIT & GIScience: [in addition to the Team Lead ML4Good we also offer positions like Senior Science Manager, Agile Coach, Public Relations & Communication](#). Last but not least we also offer a project related position for highly *innovative research projects related to climate change* at the GIScience research group at Heidelberg University: [GeCO: Generating high-resolution CO2 maps by Machine Learning-based geodata fusion](#)