

You are a highly motivated individual who loves designing and developing machine learning and deep learning systems? 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 is our mission, too! Then we actually might have a suitable and interesting job for you.

## Deep Learning Engineer (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, especially in areas such as humanitarian aid or other non-profit goals for the benefit of society and the environment.

To this end, we are looking for a motivated and experienced Deep Learning Engineer to help create AI products for smart mobility, humanitarian aid, disaster management & other geospatial applications to support sustainability and climate action. Depending on your experience

## **Your tasks** are related to at least one of the following areas

- Designing and developing machine learning and deep learning systems
- Explore state-of-the-art model families and machine learning algorithms
- Deep feature extraction using multi-modal data including satellite imagery, OSM data etc.
- Innovative use of advanced machine learning methods
- Data fusion of heterogeneous data sources for geoinformation

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**

- Experience with computer vision and machine learning for Object Detection, Instance Segmentation tasks. Familiarity with latest DL Models like Transformers, Generative Models etc. is beneficial.
- Strong foundations in probability, linear algebra and optimization.
- Hands on experience in evaluating and developing new approaches from the literature and actively implementing new concepts.
- Hands on working experience with anyone of the deep learning frameworks -TensorFlow,
  Pytorch etc.
- Quick prototyping skills in Python, Coding.
- Good communication and collaboration skills.

HeiGIT gGmbH

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- 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.).
- Previous experience in working with spatial data is beneficial.
- An above-average university degree in one of the subjects such as Geoinformatics, Computer Science, Geography, Mathematics, Physics or similar.
- German language skills preferred, but English only possible.

## We offer

an attractive position in an interdisciplinary team in a highly dynamic and growing area. 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 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 from home or 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 2 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 <a href="mailto:marrin@heigit.org">marrin@heigit.org</a>.

Please note our data protection information (<a href="https://heigit.org/privacy-policy/data-protection-information-for-applicants/">https://heigit.org/privacy-policy/data-protection-information-for-applicants/</a>) for applicants.