



(Senior) Postdoctoral Researcher (f/m/d)

3D/4D Point Clouds & Machine Learning

The **3DGeo Research Group** (uni-heidelberg.de/3dgeo, Prof. Bernhard Höfle) at the Institute of Geography and Interdisciplinary Center for Scientific Computing (IWR) is looking for a highly motivated (**senior**) **postdoctoral researcher** to strengthen our research, education and scientific software development in the field of geographic 3D/4D point cloud analysis and machine/deep learning methods. The position will **start 1 September 2023** (or depending on the availability of the candidate).

In this position you will

- Push the research frontier in the development of new **methods** to **extract information** from **dense geographic point cloud time series** (e.g., from permanent TLS monitoring).
- Strongly involve **machine learning**, and coupling of **deep learning** and synthetic training data generation by **LiDAR simulation** in your change analysis and classification.
- Contribute actively to our **scientific software** projects [py4dgeo](#) and [HELIOS++](#) by applying and extending them. Professional software development support will be provided for you.
- Have the option to **teach university courses and supervise students** of various disciplines such as geography, geoinformatics, computer science and scientific computing.

You have

- Achieved an **excellent doctoral degree** in a discipline related to geographic point cloud analysis (e.g., geoinformatics, remote sensing, photogrammetry, computer science).
- Published several **publications in leading journals** and **recognized conferences**.
- **Strong programming skills in Python** (optionally C++) and experience with **git repositories**.
- Gained initial experience with **project management** and interest for **grant writing**.

We will provide

- **Full-time (or part-time) TV-L E13** position for **minimum of 3 years (up to 6 years)**.
- **Gross salary** depending on experience starting from currently min. 52,200 € per year (gross).
- **Family-friendly** and stimulating scientific environment and **international** research group.
- **Mentoring** and professional **career coaching** towards your own professorship.
- **Start-up package** to develop own research and to hire assistants for personal support.
- Strong international **scientific network** and opportunities to collaborate.
- **Leading working environment**: State-of-the-art 3D sensing equipment, high-performance computing facilities, Scientific Software Center (SSC), etc.

Your application

- Includes a **motivation letter** (max. 1 page) addressing the given research focus of this position, complete **CV** with list of publications, links to **your open source projects** and contributions (e.g., GitHub), contact details of **two academic references**.
- Submit all documents into a **single PDF** to the given contact below.
- Review of applications will begin **May 28 2023** until the position is filled.

Contact & questions: Prof. Dr. [Bernhard Höfle](#), 3DGeo, Heidelberg University, Germany.

Heidelberg University stands for equal opportunities and diversity. Qualified female candidates are especially invited to apply. Persons with severe disabilities will be given preference if they are equally qualified. Information on job advertisements and the collection of personal data is available at www.uni-heidelberg.de/en/job-market.