



Job vacancy

Nr. 20211013

The GWDG is looking for a

Data Scientist (m/f/d)

with interest in ecological topics to join the high-performance computing team of the working group "eScience" (AG E). The regular working week is 39 hours. The salary is in accordance with the collective agreement for the public service (federal government); the classification is planned in pay group TVöD E 13. The position is initially limited to two years, but an extension is being sought. If interested, there is the possibility of a doctorate.

The position is embedded in the BMBF-funded project FORESTCARE. This project serves to solve one of the most important global problems of our time: For years, forests worldwide have been under severe drought stress and an adaptation of traditional forestry is inevitable. The core of this adaptation is a significantly improved data acquisition and data analysis for forest condition monitoring. Therefore, the FORESTCARE project will efficiently integrate ground data, drone data and satellite data in a Big Data / Machine Learning approach with Deep CNNs on HPC systems.

The project is embedded in a network of forest scientists, geoinformation system (GIS) experts and data scientists. Partners are the GWDG, the renowned forestry faculties of the universities of Göttingen and Freiburg, and the successful medium-sized GIS companies GISCON Systems GmbH and con terra GmbH. Associated partner is the worldwide leading GIS software provider ESRI. The project team sees itself as an interdisciplinary training and development unit with intensive information transfer between the disciplines and a horizontal management structure.

The GWDG is a joint institution of the Georg-August-Universität Göttingen and the Max Planck Society. It fulfills the function of a computing and IT competence center for the Max Planck Society and is the university computing center for the University of Göttingen. In addition, the University of Göttingen with the GWDG is one of eight computing centers in the National High Performance Computing (NHR) alliance. The scientific research tasks of the GWDG fall within the area of applied computer science. It also promotes the training of specialists in information technology.

Your tasks

- Develop a CNN-based, scalable deep learning approach for correlating ground data, drone data, and satellite data
- Developing an AI model for evaluating sensor signals from a drone-based Electronic Nose
- Organization of HPC usage and data management in the project in collaboration with the GWDG HPC and storage teams
- Presenting the project on site and at scientific conferences

Your skills

- Completed university studies in computer science or a scientific or technical field of study
- Good programming skills, preferably in Python
- Good knowledge in statistics and machine learning, especially deep learning
- Good analytical thinking skills
- Independent, structured and systematic way of working
- Strong teamwork and communication skills
- Very good English skills, both written and spoken

Our offer

- An interesting, versatile job at the interface between ecology, data science and high-performance computing
- Flexible working hours and the possibility of mobile working
- An environment that offers enjoyment in collaborative work and exchange at eye level
- A working atmosphere with leeway and appreciation
- Collaboration in a competent and committed team
- Social benefits customary in the public sector

The GWDG strives for gender equity and diversity and therefore welcomes applications from all backgrounds. The GWDG is committed to employing more severely disabled people. Applications from severely disabled persons are expressly encouraged.

Have we aroused your interest? Then please send us your application by **28.10.2021** using our online form at <https://s-lotus.gwdg.de/gwdgdb/age/20211013.nsf/bewerbung>

If you have any questions about the advertised position, please contact Prof. Dr. Julian Kunkel via e-mail: julian.kunkel@gwdg.de.