

GeoAI

Make smarter decisions with artificial intelligence



By integrating custom-fit AI components into your GeoIT infrastructure, you can optimise processes, gain targeted information and make smarter decisions. con terra's GeoAI experts will support you in this task – from the development of initial project ideas, to the integration of AI into your processes and the monitoring of success.



con•terra
locate the future

Make smarter decisions with artificial intelligence

Artificial Intelligence (AI) is becoming an increasingly crucial factor in future-proofing infrastructures. Especially when dealing with geodata, the use of artificial intelligence can significantly simplify your work and processes. Thanks to our many years of experience as a GeoIT integrator, we know where GeoAI can be used to optimise highly complex workflows, uncover hidden patterns, or gain new insights. For us, GeoAI is not a trendy word. For us, it is an option to significantly simplify your processes – and only if it shows real benefits.

GeoAI briefly explained

GeoAI is a machine learning-based technology that enables the capture of complex patterns and structures in (spatial) data. This allows you to automate, optimise or extend analyses and forecasts, and integrate them into other business processes.

Application possibilities of GeoAI

Artificial intelligence can be used to support many areas of data processing. For example, the use of voice control helps optimise tasks that require free hands. Automatic image recognition speeds up tedious mapping tasks, whereas deep learning models are used to uncover complex relationships between data. In our projects, we have already been able to use artificial intelligence profitably in various ways. We distinguish between four different deployment methods:



Object and Image Recognition

- Aerial and satellite image analysis
- Detection in drone images



Natural Language Processing

- Voice control
- Speech-to-text



Data Enhancement

- Anomaly detection
- Data quality assurance



Forecasting

- Prediction of local events
- Analysis of dynamic systems

GeoAI by con terra

Our range of services is individual and comprehensive: Together with you, we develop suitable approaches and analysis procedures, select tools and determine the appropriate AI measures that will take your geodata use to a new level. From the development of initial project approaches to monitoring of success – with us, GeoAI is used precisely when it provides you with true added value. It is important that we do not fundamentally change established processes, but rather optimise them in a targeted way by the needs-oriented use of GeoAI.

Our products and services

- GeoAI Discovery: Individual analysis of needs and potential
- Development of concepts and proof of concepts
- Flexible integration into your business processes
- Monitoring and support

Count on our experience

The selection of appropriate AI measures is not the only factor responsible for the success of a GeoAI project. Comprehensive data processing is especially crucial. As a long-standing partner of Safe Software, manufacturer of the FME platform, reliable data management is one of our core competencies. Rely on our experience in the field of GeoIT integration and benefit from our expertise.

Data preparation

AI methods

Integration and operation

Visualisation and application

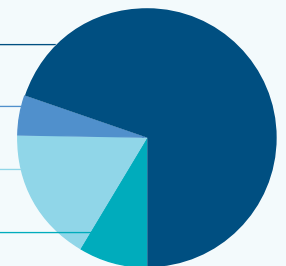


Fig. : Composition of GeoAI projects at con terra

Our expertise

- **Data preparation:** We harmonise your data sources and formats and make them usable for AI methods.
- **AI methods:** From voice control to deep learning methods, we have different technologies in use.
- **Integration and operation:** As a GeoIT integrator, we have many years of experience in designing custom-fit solutions.
- **Visualisation and application:** Platform-independent, user-friendly, individual – our solutions are tailored to your needs.