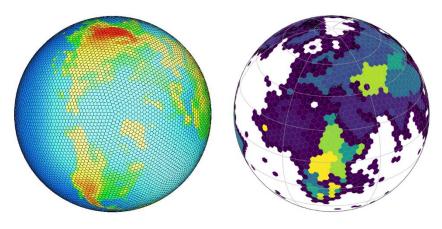




2-year postdoc position in Geoinformatics

We are looking for a 2-year (can be extended) postdoc in geoinformatics to work on novel data cube implementations in Discrete Global Grid Systems (DGGS). The research is part of the "Creating Water-Smart Landscapes" project funded by European Research Council and Centre of Excellence for Sustainable Land Use. You will be working in the Landscape Geoinformatics Lab in the Department of Geography, University of Tartu. The team is led by Prof. Evelyn Uuemaa and has strong expertise in large scale geospatial analysis, date cubes, automating geospatial analysis, remote sensing applications.



Core tasks include:

- conduct a literature review of DGGS theory, designs, and implementations
- systematically test and assess different data indexing, conversion, and re-gridding algorithms into selected DGGS under practical computing performance and data storage considerations (i.e. data ingestion)
- develop and automate workflows for data ingestion (pipelines) for raster and vector into a DGGS-indexed large data storage and analysis framework (database, datacube)
- evaluate efficient query and analysis patterns for DGGS-based data (spatial queries, traversal, aggregation)

Requirements

- PhD in Geoinformatics, Computer Science, Physics or related fields
- Good knowledge of Python and data-focused programming
- An interest in or experience with geospatial data and applications, in particular: <u>GeoPandas</u>, <u>Shapely</u>, <u>Rasterio</u>, <u>Xarray</u>, and a general overview of the <u>Pangeo</u> & <u>Jupyter</u> ecosystem
- Experience in writing scientific publications
- Be a team player
- Have "can-do" attitude and critical thinking

To apply

Please send to evelyn.uuemaa@ut.ee latest by 15th of November:

- 1) your CV (max 2 A4),
- 2) a list of research publications,
- 3) motivation letter (max 1 A4),
- 4) copies of MSc diploma and transcripts and PhD diploma