Geospatial Analyst Job Description

March 2024

About the role

Watermarq is seeking a geospatial analyst to support our mission to develop decision-useful data to support investment and collective action for water security in multiple catchments across the world. The role will initially be a **6 month post**, with the potential for this to transfer into a permanent role. We welcome applications from those seeking **both part- and full time positions**.

About us

We are developing a framework for valuing water that draws on new and emerging datasets, including geospatial (satellite) imagery, other remote sensing data, in situ measurements and contextual data. As a mission driven organisation, we are motivated by the opportunity that water security presents in achieving improved sustainable development outcomes, particularly to marginalised communities.

We are an early stage company, and we are impatient when it comes to addressing water insecurity. We look to leverage our values of openness, focus, transparency and humility to achieve big things quickly. We are also committed to innovation, and we benefit from close relationships with partners within the UK climate and space tech community as well as with the University of Oxford's School of Geography and the Environment.

We ultimately aim to provide actionable insight to those governing, investing in and operating within water-scarce basins around the world. You can find out more about us at www.wtrmrq.com.

You will need

- An MSc (or PhD) in Environmental Sciences, Policy, Hydrology or a related field.
- To be based in the UK and to have the right to work in the UK.
- Strong GIS skills, with a demonstrated history of applying these in a research or work setting. This will include having handled large geospatial databases, derived spatial statistics using geoprocessing tools, and visualized compelling results as maps and graphs.
- Interest and ability to conduct assessments of water and environmental issues.

Abilities

- Interpret and collect data from remote sensing third party applications, such as Global Water Watch and Dynamic World.
- Produce maps and statistical analysis to support product outputs.
- Combine multiple datasets (physical and socioeconomic datasets) to develop indices.
- Document and log development activity to support effective teamwork.

Skills & experience

Essential

- Proficiency in GIS software such as QGIS, ESRI Software suite (e.g. ArcPro, ArcGIS Desktop, Server, and Online), MapInfo or similar.
- Experience in spatial analysis and modelling (e.g., use of ArcGIS Spatial Analyst tools, Model Builder, coding in Python, R, SQL or equivalent).
- Experience in handling large publicly available spatial databases or crowd-sourcing platforms such as Open Street Maps.
- Experience accessing remote-sensing databases, e.g. via cloud computing platforms such as openEO or Earth Engine.

- Self-directed individual with an ability to work independently while involving other teammates.
- Ability to explain your work to a non-technical audience and to collaborate in a team.

Desirable

- Experience of water and environmental issues within a geospatial context is a big bonus.
- Familiarity with Sentinel, MODIS, Landsat, or other satellite imagery and derived products.
- Experience with version control systems, i.e. git.
- Familiarity with application development using Google Earth Engine.
- Knowledge of OGC standards.
- Awareness of emerging geospatial research trends and technologies.

Benefits

We offer a competitive salary and other benefits including pension, flexible hours, and a hybrid working environment. We currently have coworking space in central Oxford and London (Waterloo).

How to apply

- To apply, please complete the **application form**. We will assess applications on a rolling basis, so we encourage early applications.
- If you have any questions or you would like to request any reasonable adjustments please contact **george.carew-jones@wtrmrq.com**