Geospatial Data Scientist

Brussels, Belgium

CONTEXT

WeForest (www.weforest.org) is a fast-growing international non-profit organization with headquarters in Belgium. We develop forest landscape restoration projects to combat global warming and extreme poverty. Our mission is to conserve and restore the ecological integrity of forests and landscapes by engaging communities to implement and deliver lasting solutions for climate, nature and people.

Our activities are expanding at a fast pace and we are now looking for an HQ-based **Geospatial Data Scientist** to further strengthen our Monitoring, Evaluation and Research Operations subteam.

JOB PURPOSE

This position will primarily focus on performing geospatial analysis (remote sensing and GIS) to better understand landscape dynamics in our projects. This can range from assessing changes in forest or agricultural land cover in the past to support new project design (Monitoring & Evaluation baseline), to evaluating forest cover increase due following project evaluation (M&E midline & endline). This position will aim to support most projects in the seven countries where WeForest is active (Argentina, Brazil, Ethiopia, Malawi, Senegal, Tanzania & Zambia).

The position can be fully remote and thus based anywhere in the world, although ideally being based in one of our project countries or (close to) our HQ office in Belgium. The position will be embedded within the Global operations team, reporting to the Head of M&E and Research and closely collaborating with our (part-time) senior geospatial data scientist. The successful candidate will have regular contact with the rest of WeForest's Operations and Communications & Marketing Teams, next to period interaction with the designated M&E and/or Remote Sensing focal points in the project teams.

MAIN RESPONSIBILITIES

Geospatial data analysis (e.g. land use and land cover (LULC) maps, LULC changes, fire monitoring) and dissemination

- Create high-spatial resolution land use maps for different years to help explore land cover & land-use changes through time (e.g. using high-resolution images, radar images, LIDAR images, machine learning algorithms), and produce clear reports (and maps) to share insights with the wider WeForest team.
- Main focus will be on forest and/or tree cover (agroforestry) as the main land-use type, but sometimes other land-use types will need to be mapped (e.g. agricultural land, grassland).
- Help develop and implement Remote Sensing-based fire monitoring protocols to support our projects that implement fire management practices and/or are prone to natural wildfires.
- Manage and structure all produced geospatial data and analyses for future reference within WeForest.
- Lead and/or assist with translating Remote Sensing-based M&E findings for use by the fundraising and communication teams.

GIS and geospatial data (analysis) support & capacity building

- Identify areas where technical support regarding GIS (and to a lesser extent RS analysis) to project teams is required and facilitate capacity building through one of several modalities (e.g. in house training, external training, protocol/tutorial development, etc.).
- Manage the WeForest QGIS-based intervention polygons database through close interaction with project teams and support from the Head of M&E and Research.

- Act as workgroup lead for the HQ-level '5% M&E' Remote Sensing workgroup, that aims to keep track of progress, budget allocation and short-term planning of additional HQ-led remote sensing-based M&E activities complementing the M&E activities performed at the project-level.
- Guide project teams and/or implementing partners on collection of field-based data (sample design, data collection tools/quality analysis of collected field data), and on proper geospatial data and metadata storage & management.

Technical advisor for geospatial analysis-related topics

- Review quality of & provide feedback on technical geospatial analysis details for any consultant-based or project-teams lead geospatial work.
- Help WeForest on evaluating the quality of specific third-party geospatial products (e.g. carbon estimates) or services (software solutions) and structure their incorporation in our M&E workflows.

SKILLS & QUALIFICATIONS

- At least M.Sc. or equivalent experience in a relevant field (e.g. remote sensing, geospatial analysis, earth observation, GIS, geography).
- Good technical skills and knowledge of relevant software (e.g. Google Earth Engine, Python, R, QGIS, JavaScript, Kobo Collect).
- Proven experience with LULC mapping in general, and forest/tree cover more specifically, including experience with machine learning model development.
- Geospatial and Field experience with tropical (dry) forests is a plus.
- A proven track record of having developed relevant RS/GIS-related data collection/analysis frameworks, tools and protocols at project and/or organizational level.
- Knowledge of suitable (open-access) satellite data and GIS resources.
- Good moderation, facilitation and training skills.
- Good organizational skills and analytical skills.
- Ability to work in a team of diverse cultural backgrounds.
- Excellent knowledge English, good knowledge of French is a plus.
- Understanding of general concepts related to Climate Change, Forest and Landscape Restoration, and agroforestry.
- Experience with carbon project-development and associated RS work is a plus.

TERMS & CONDITIONS

Position: Full time employee (contract for undetermined period).
Start date: As soon as possible.
Probation period: 3 months.
Package: Competitive package for a small NGO, with salary based on experience, hospitalization insurance, meal vouchers, and pension plan.
Location: flexible, but (close to) Belgium or one of the project countries as plus.

INTERESTED?

Please send applications in English to recruitment@weforest.org with your CV, a motivation letter and the contact of 2 recent references by July, 31st, 2024. Make sure to mention the job title in the subject of the email, and to indicate where you saw the job post. Due to the anticipated high number of applicants, only shortlisted candidates will be contacted for an interview.

We thank you in advance for your interest.