

Internship: Fire monitoring through remote sensing of WeForest's restoration projects in Zambia and Malawi

- WeForest asbl/vzw (non-profit)
- Internship agreement (tripartite convention) or volunteering
- Location: position based in Brussels, open to remote work (EU)
- Schedule: flexible
- Duration: 3 months
- Starting date: June

CONTEXT

WeForest is an international non-profit association headquartered in Belgium with the mission to conserve and restore the ecological integrity of forests and landscapes, engaging communities to implement and deliver lasting solutions for climate, nature and people. We promote science and best practices in a culture of sharing and inclusion, so that others can replicate and augment what we do.

OBJECTIVE

WeForest has supported some forest restoration projects on the Miombo Belt in Zambia and Malawi. In these projects, Assisted Natural Regeneration is the main approach applied. Fire is one of the main disturbance factors and plays a critical role in preserving the functioning of ecosystems in Miombo woodlands. Wildfires have received particular attention due to their associated ecological, economic, social, and political impacts. The study aims to monitor fire within specific project areas situated in the Miombo woodlands.

APPROACH

- Fire Monitoring using spectral indices (Sentinel 1 and Sentinel 2);
- Compare the indices with other available Fire products (e.g., FireCCI51: MODIS Fire_cci Burned Area Pixel Product, FIRMS: Fire Information for Resource Management System, and MCD64A1).

REQUIRED SKILLS & QUALIFICATIONS

- Currently pursuing a Bachelor's or a Master's degree in Science, Geography, Engineering, Environmental studies or equivalent, or a professional certification in Geography, GIS, or Remote Sensing;
- You have proven expertise in remote sensing data processing and geo-information systems;
- You have sound programming skills in Python, or R, or Google Earth Engine;
- Expertise in applying machine learning techniques on remote sensing data is an asset;
- Specific expertise in SAR Remote Sensing is an asset;
- Writing and presentation skills in English is key;
- Ability to process, analyze, and model data in geospatial software (e.g., QGIS, Esri ArcGIS);
- Excellent knowledge of Microsoft Word, Excel, and PowerPoint, working knowledge of Google Docs, working knowledge of Microsoft Exchange;
- Attention to detail and a sense of responsibility;
- Good communication in English (written and spoken) and interpersonal skills.

OUR OFFER

- Be part of a motivated and highly skilled team in an international environment;
- Contribute to promoting Forest and Landscape Restoration;
- We provide a daily allowance to compensate for meal and homeworking expenses.



HOW TO APPLY

Please send applications in English to recruitment@weforest.org with your CV, and a motivation letter by April 12, 2024. 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.