

JOB DESCRIPTION

Database and GIS Officer

Effective: November 2015

Duration of contract: Until 31st March 2017

Reporting to: Database and GIS Coordinator

Close working relationship with: other staff and consultants in the Programmes Team.

The Rainforest Foundation UK

The mission of the Rainforest Foundation UK (RFUK) is to support indigenous peoples and traditional populations of the world's rainforest to:

- Secure and control the natural resources necessary for their long-term wellbeing and managing these resources in ways which do not harm their environment, violate their culture or compromise their future.
- Develop means to protect their individual and collective rights and to obtain, shape and control basic services from the state.

RFUK considers that an essential first step to protect and manage the tropical forests and to reduce poverty in tropical forest countries is to realise the rights of the traditional and indigenous communities who live in those forests. With secure rights to land and livelihoods, forest peoples can effectively manage forest resources and direct and manage their own development. Founded in 1989, RFUK has in the past 20 years built a solid body of work based on this rights-based approach to development and protection of the rainforest. Although our work is focused on the Congo Basin, where RFUK has worked since 1996, we also work in the Peruvian Amazon. RFUK tackles the underlying causes of deforestation linked to the problem of disenfranchisement of indigenous forest peoples globally and locally. From the field to the international policy arena, RFUK reinforces the active participation of forest peoples in the decisions that affect them.

RFUK's current staff size is 18, with a number of volunteers or interns at any given time. It is governed by a Board of seven Trustees. The London-based Foundation is part of a network of sister organisations, which also include the Rainforest Foundation US and the Rainforest Foundation Norway.

Community mapping and monitoring

Community mapping and monitoring is a cross-cutting component of RFUK's programmes strategy. Technological developments are seen as key tools to promote community rights to forest lands and resources and to improve governance.

[MappingForRights](#) is an online platform developed by RFUK since 2011 which brings together expertise in the fields of participatory mapping, geo-spatial technologies

and policy development concerned with community and indigenous land rights and improved forest governance in the Congo Basin. The website provides related governments, policy makers, NGOs, researchers and communities with an interactive map providing easy access to accurate geographical information about the presence, land use and rights of indigenous peoples and other forest-dependent communities in the Congo Basin.

[The real-time community monitoring system:](#)

In 2015, the Rainforest Foundation UK, successfully developed and tested a ground-breaking new system which enables communities anywhere in the world to capture and transmit accurately geo-referenced reports of forest illegalities to a central database in real-time, even from areas where there is no mobile phone or internet connectivity.

We are launching a new project, starting from 1st October, that will trial community-based real-time monitoring of forest activities, in Ghana, Cameroon and DRC. With local partners, it will test the opportunities to integrate such systems into governmental forest enforcement mechanisms, as a means of containing illegal logging and contributing to the implementation of Voluntary Partnership Agreements (VPAs).

The project will support continued technical development of the system, and explore suitable mechanisms for delivering community incentives. By highlighting communities' engagement in efforts to tackle illegal logging, it will seek to strengthen their role in deliberative processes. It will also support the development of a 'Community of Best Practice' on community-based forest management.

KEY RESPONSIBILITIES

General:

The postholder will be responsible for assisting in the development of the mapping and monitoring component of RFUK's strategy, under the supervision of the GIS Coordinator.

Specific responsibilities and tasks:

The GIS and Database officer will be responsible for the following tasks, under the supervision of the GIS Coordinator.

1. GIS-Database-Web

- Creating and maintaining the structures necessary for GIS data storage, both in-house and on remote servers;
- Developing the tools for loading/transferring GIS data between different systems;
- Manipulation, analysis and presentation of geographical information by creating and using systems to convert GIS information from one format to another;
- Developing internet applications to present GIS data and tools on websites;
- Using tools to join together different GIS datasets and create new information;
- Supporting the GIS Coordinator to deliver projects in a timely fashion;
- Support in the writing of documentation (Technical/Non-technical/Training documents);
- Contributing to the development of reports, briefings, leaflets and other media to inform RFUK target groups.

2. MappingForRights website and database

- Regular updating of the website and database content, as appropriate to data gathering developments;
- Ensuring updating of existing databases on a regular basis and building new systems for fresh information;
- Re-designing if necessary and improving the presentation of the website and database as appropriate to ensure maximum ease and clarity of use of the information, considering both back-end organisation of data and front-end accessibility;
- Establishing the needs of users and monitoring user access and security;
- Writing technical/general website documentation and updating existing text, including data standards, procedures and definitions for the data dictionary (metadata);
- Maintaining data standards, including adherence to the Data Protection Act;
- In conjunction with the Research and Policy Coordinator and the Mapping Coordinator, controlling access permissions and privileges and maintaining systems for user rights of the website;
- Planning, designing and testing of new features and functionality for the development of the website and the database and other technical developments;
- Working closely with several third-party developers and contractors, and writing specifications and TORs for external developers and contractors.

3. General

- Supervising the work of consultants, researchers, interns and volunteers where necessary;
- Ensuring good coordination with other members of the Programmes Team and ensure regular communication and information sharing in this respect;
- Representing the RFUK at external meetings, where required;
- Contributing to the production of external communications about our work;
- Participating in RFUK internal meetings;
- Undertaking other tasks as required by the GIS Coordinator and the Head of Programmes.

PERSON SPECIFICATION

Detail	Essential	Desirable
Knowledge and Experience	<ul style="list-style-type: none"> ▪ Master degree in a relevant subject ▪ At least three years' experience in website and database development, preferably in a relevant context. ▪ Knowledge of using Geographic information systems (ArcGIS, MapInfo), data and software, preferably open source (QGIS, GRASS), and 2 years of experience in this field ▪ Skills in using Quantum/QGIS or other Open Source GIS software packages/frameworks ▪ Knowledge of scripting (Geo-processing, web applications, libraries) ▪ Good understanding of HTML, CSS and JavaScript - including experience in using mapping frameworks (OpenLayers, Leaflet, GeoExt, etc.) ▪ Preferably knowledge of scripting (Geo-processing, web applications, libraries) <ul style="list-style-type: none"> ○ OpenLayers, Leaflet, Turf.js ○ GDAL ▪ Knowledge of Open Geospatial Consortium (OGC) standards (WMS, WFS, WCS) ▪ Experience with relational database management systems and technologies such as PostgreSQL, SQLite 	<ul style="list-style-type: none"> ▪ Excellent organisational skills and attention to detail. ▪ Design & Interaction knowledge/experience ▪ Demonstrated ability to work effectively, both independently and in a team environment, in an atmosphere of multiple projects, shifting priorities, and deadline pressures. ▪ A good understanding of the Data Protection Act ▪ Ability and desire to work in a fast paced environment, where the technology is constantly changing ▪ Good communication, presentation and negotiating skills

	<ul style="list-style-type: none"> ▪ Some experience with programming languages, ideally in context of GIS (C, C#, Java, Python) ▪ A proven knowledge of SQL, especially inserting and retrieving data and writing complex queries ▪ A good understanding of database architecture, software and database management systems ▪ Excellent problem solving skills ▪ A willingness to keep up to date with developments in relevant technologies 	
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Detail	Essential	Desirable
Personal Skills and Attributes	<ul style="list-style-type: none"> ▪ Attention to detail with implementation and maintenance of standards in relation to data and code. ▪ Ability to work in a team, or alone. ▪ Willingness and ability to learn on the job, keen to undertake training. 	<ul style="list-style-type: none"> ▪ Strong sense of layout and design. ▪ Empathy with and commitment to the Rainforest Foundation's Vision and Mission. ▪ Interest in human rights & environmental issues. ▪ Strong presentation skills. ▪ Strong editorial skills.

Summary Terms and Conditions

Hours, remuneration and place of work

The post is initially offered on 1.5 year contract (ideally starting from 2nd November 2015), with a 6-month probationary period.

The post is a full time post, based on a 35-hour working week.

The starting salary is £28,146 per annum, including London weighting.

Monthly salary is paid by Bank Automated Credit transfer, on the 25th of every month.

Holidays, sick pay and other benefits are provided in accordance with statutory requirements. At present, 30 days paid leave per year are offered.

Non-contributory pension (4% of salary, commencing on satisfactory completion of 6 month probationary period).

The place of work is 233a Kentish Town Road, London NW5 2JT. This is a non-smoking environment. There is no car-parking provided for the post-holder, although bicycles are allowed in the building.

Equal Opportunities

RF UK is an equal opportunities employer, and makes no discrimination on the grounds of gender, race, age, physical abilities, religious or sexual persuasion.

233a Kentish Town Road unfortunately is not as accessible to those with physical disabilities as the organisation would like, but every effort will be made to provide an accessible and pleasant working environment for all staff, trustees, volunteers and visitors.