

Connecting Space to Village: Geospatial information for improved environmental decision making in the Amazon

SERVIR-Amazonia - Science and Data Lead

[Spatial Informatics Group, LLC](#) (SIG) was founded in 1998 and is a group of applied thinkers with expertise in environmental fields ranging from landscape ecology, wildlife ecology, transportation modeling, ecosystem services valuation, natural hazards risk assessment, and forestry to natural resource economics. Our group combines spatial analytics with ecological, social and economic sciences to understand the effects of management and policy choices on the short and long-term stability of ecosystems. We translate data into knowledge that can be used to inform decisions.

SIG is an Equal Opportunity Employer. We are committed to diversity which includes the recognition that our success is best advanced by the leadership and contributions of women and men of diverse backgrounds, beliefs and culture. We encourage applicants from all cultures, races, colors, religions, sexes, national or regional origins, ages, disability status, sexual orientation, gender identity, military, or other status protected by law.

Location: Americas Hub of the Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT) in Cali, Colombia.

Posting Date: March 16, 2020

Application Deadline: March 31, 2020. Note the interviews will be on a rolling basis. Applications will be continuously reviewed until a suitable candidate is identified.

Job Description

Spatial Informatics Group (SIG) is searching for a Science and Data Lead for the [SERVIR-Amazonia Program](#), part of SERVIR Global, a joint development initiative of the National Aeronautics and Space Administration (NASA) and the United States Agency for International Development (USAID). Since 2005, SERVIR has been working in partnership with countries in Africa, Asia and Latin America to co-develop and use information provided by Earth Observation (EO) satellites and geospatial technologies.

The Amazon Basin, one of the planet's most precious environmental reserves, is under threat from adverse human activities and a changing climate. The resulting forest loss, increasingly contaminated water, and exposure of local communities to unprecedented fires and floods have diminished the ecosystem service capacity of this globally essential ecosystem. SERVIR-Amazonia is a five-year program (2019-2023) led by the Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT). It brings together local knowledge and some of the world's best science in EO and geospatial technologies.

SERVIR-Amazonia is hosted at the Americas Hub of the Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT) in Cali, Colombia. The SERVIR-Amazonia partners include Spatial Informatics Group - SIG (United States), Conservacion Amazonica - ACCA (Peru), Institute for Forest and Agriculture Management and Certification - IMAFLORA (Brazil). The SERVIR-Amazonia Hub is working with regional partners to understand needs, and translate these needs into the development of geospatial tools, products and services that will allow countries of the Amazon basin to improve environmental decision-making and to better incorporate the voice of women, indigenous peoples and their communities. The Program is working in Brazil, Peru, Colombia, as well as in Ecuador, Suriname, and Guyana.

SERVIR-Amazonia covers four thematic service areas empowering actors across the region to track and understand environmental changes in near real-time, and improve decision-making in relation to sustainable landscape challenges in the Amazon. The four thematic areas include: Ecosystem Management, Fire and Drought, Water Resource Management and Hydro-Climatic Disasters, and Weather and Climate. Further information is available on the Program [blog](#) and [brochure](#).

SIG will employ the Science and Data Lead (SDL) who will be responsible for coordinating the Program Management Unit's (PMU's) geospatial service design and delivery. The SDL will be the principal technical expert in the hub and the primary technical contact with the NASA science team. The selected candidate will have operational responsibility for developing new high-quality user-tailored data, tools, applications, models to address on-the-ground priorities, and data sharing components. The SDL will report to the Project Director - Carlos Gasco - and be supervised by David Saah, Managing Principal at SIG. The PMU is composed of the Hub's personnel from CIAT, ACCA, IMAFLORA, SIG, University of Arkansas and the NASA Science Coordination Office.

The Science and Data Lead will be based at the Americas Hub of the Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT) in Cali, Colombia and will coordinate technical activities in the target countries in the Amazon Basin. The position will involve frequent travel within the region to engage with Consortium partners. The SDL will work in coordination with the Project Director, the User Engagement Lead, the MEL/Knowledge Management/Communications coordinator and the PMU.

The initial appointment is for one year (beginning Spring 2020), to be renewed on a year-to year basis. A competitive salary and benefits will be provided.

Responsibilities

Service Design and Delivery:

- Coordinate the program's scientific and technical aspects of the service design and delivery activities in line with SERVIR-Amazonia's Theory of Change, Strategic Approach and Intermediate Goals
- Provide scientific and technical leadership to the Program across the thematic areas, drawing from the SERVIR Planning Toolkit
- Help organize the PMU to implement the activities set out in the program's work plan for service design and delivery, to ensure that service delivery progresses in a timely manner
- Communicate with the program's Module and Service Leads, who are responsible for supervising individual service design and delivery, to provide scientific back-stopping, track program timelines, identify resourcing needs and maintain information quality and control
- Participate in the user consultation activities and provide technical support to the PMU for the development of user needs assessments, including stakeholder mapping and service idea generation
- Supervise the program's Geospatial Information Technology (GIT) implementation
- Develop user-driven geospatial information including data, tools, applications, and models, in collaboration with colleagues in the PMU
- Deliver capacity building to Consortium partners including training workshops, technical assistance and planning support, in collaboration with colleagues in the PMU
- Implement a data sharing and open data strategy for the Consortium

- Support the integration of a gender and indigenous peoples lens into all service design and delivery, in coordination with the support of the program's Gender Advisor and Indigenous Peoples Advisor.
- Develop and maintain a strong understanding of national development plans related to land use and planned funding initiatives by other stakeholders in the region
- Facilitate dialogue on technical matters between the PMU and the NASA science team, including the Service Coordination Office (SCO) and Applied Sciences Team (AST)
- Coordinate all technical interactions with NASA including communication and participation in all SERVIR-Amazonia activities, such as user needs assessment and service design and delivery

Representation:

The following responsibilities will be jointly held with colleagues in the PMU and will involve day-to-day coordination with the Project Director, User Engagement Lead and MEL/Knowledge Management/Communications Coordinator.

- Represent SERVIR-Amazonia to governmental and non-governmental stakeholders in the region
- Build and manage strong and productive partnership with NASA, USAID and Consortium partners to facilitate learning and knowledge exchange across the project partnership
- Participate in regular review meetings with NASA and USAID to communicate the Program's outputs, outcomes and impact
- Promote the Program with stakeholders, the donor community, and the general public in target countries, in line with the program plans.

Operations:

- Comply with USAID and Program requirements including attendance at meetings, development of project deliverables, reports and plans, and respond to ad hoc information requests
- Prepare the service design and delivery sections of the annual workplan and quarterly report under the supervision of the Program Director and in coordination with the other members of the PMU
- Take into consideration inputs and recommendations from the Gender Advisor & the Indigenous Peoples Advisor.
- Ensure that the Program fulfills the scientific and technical stipulations of the Program's Cooperative Agreement with USAID, with support from the PMU
- Coordinate with the User Engagement Lead to deliver services with Consortium partners.
- Support the MEL Coordinator in their responsibilities to monitor, evaluate and learn from program activities, outputs and outcomes.

Requirements

- Proven record of:
 - Development of user-driven geospatial information such as tools, databases, models, applications or associated training, minimum five years experience
 - Project management of scientific and technical teams to deliver geospatial information
 - Leadership experience of cross-cultural teams, and some experience in distributed teams desirable

- Collaboration with scientists across the region/thematics/technical domain of the Program
- Productive engagement with government agencies or other clients/users of geospatial information
- Desirable experience:
 - Co-operation and reporting experience with USAID and/or NASA, government agencies, indigenous people organizations
 - Software expertise for spatial analysis and data management including Google Earth Engine, Colab, Tensorflow, Collect Earth Online, SNAP, Tethys, Geoserver, R, Jupyter Notebooks, QGIS
 - Programming expertise in Javascript, R, Python
- Other requirements:
 - A PhD in GIS, Remote Sensing, Geography, Natural Resource Management, or other field relevant to this position. A minimum Master's level degree in a relevant field is required
 - Strong written, presentation and verbal communication skills in at least two of the following languages: English, Spanish and Portuguese.

Terms of employment

The position is internationally recruited and will be based at the Americas Hub of the Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT) in Cali, Colombia. The initial employment contract with SIG will be for one (1) year, and is renewable on an annual basis depending on performance and availability of resources. For international applicants, a Colombia work permit will be provided for the SDL and dependents will benefit from a visa to live in country. CIAT headquarters offers a multicultural, collegial research environment, with a diversity of staff to contribute to research excellence.

Applications

Applicants are invited to send a cover letter illustrating their suitability along with a detailed curriculum vitae, including name and contact details of three referees knowledgeable about the candidate's professional qualifications and work experience. All correspondence should be addressed to Human Resources office (jobs@sig-gis.com) and include "Science and Data Lead" in the subject.

Closing date for applications: **March 31st 2020**. Please note that this job vacancy will remain open until filled and applications will be processed on a rolling basis. Early application is encouraged.