

Programming/Development Officer

The Southern African Science Service Centre for Climate Change and Adaptive Land Management (SASSCAL) has been established by five Southern African countries: Angola, Botswana, Namibia, South Africa and Zambia with support from the Federal Republic of Germany. The overall objective of SASSCAL is to improve the livelihoods of people and to enhance adaptive land use and sustainable economic development in Southern Africa under the global change conditions with focus on five thematic areas of Agriculture, Biodiversity, Climate, Forestry and Water. The SASSCAL initiative focuses on research, capacity development and the provision of appropriate products and services aimed at mitigating and/or dealing with some of the impacts of Climate Change. As part of SASSCAL's research infrastructure, SASSCAL operates a regional network of about 150 Automatic Weather Stations recording hourly climate data which are made available through an online platform in nearly real-time (www.sasscalweathernet.org).

SASSCAL invites suitable applications for the positions of a **Programming and Development Officer** in its Regional Secretariat, located in Windhoek, Namibia. Reporting to the Director of Science and Technology/Research and Capacity Development (DSTCD), the WeatherNet Programming and Development Officer will be responsible for guaranteeing a seamless handover at the receiving end, contributing to the further development of the WeatherNet system and ensuring its sustainable operation at the SASSCAL Regional Secretariat (RS). The WeatherNet Programming and Development Officer will be prepared for his/her tasks through an intensive on-the-job training by the team currently administering the WeatherNet, i.e., they will be actively involved in all activities for regular operation as well as for the further development of software and databases powering the system. **This role requires a candidate with an excellent background in user interface development, data structures, design patterns, and modern programming practices.**

MAJOR RESPONSIBILITIES:

- Identifying and implementing new infrastructure to host the WeatherNet system at the RS in Windhoek, this will be done with support and liaison from the Systems Administrator and the Data Management Officer.
- Initiating and ensuring the rolling migration of the WeatherNet system from the current infrastructure to the new infrastructure, with particular focus on the frontend.
- Identifying missing use cases for the WeatherNet system then documenting and implementing these in consultation with management and end users.
- Identify and implement new features to be added to enhance user friendliness of the WeatherNet system using up-to-date technologies while ensuring its robustness and functionality.
- Design and implement automation strategies to improve data processing and data dissemination.
- Design and implement features to improve visualization and download mechanisms.
- Design and implement User Interfaces to provide geographic visualization of stations and data access using up-to-date technologies.
- Designing and implementing test cases and Continuous Integration and Continuous Deployment strategies

- Adapting existing system scripts, database procedures and CRON Jobs

MINIMUM EDUCATIONAL QUALIFICATION:

- At least a 4-year BSc (honours) degree in Information Technology, Computer Science or a related discipline.
- A Master's Degree in Computer Science/Information technology is an added advantage.

SKILLS, KNOWLEDGE AND EXPERIENCE REQUIRED:

- Proven knowledge of weather observation techniques, in particular data transfer procedures
- Proven experience as a Software engineer/developer (3 years minimum)
- Experience designing and developing scalable, secure and robust data driven applications
- Comfortable with using the Linux and/or Unix terminal
- Experience with Source Version control e.g. GIT/SVN
- Knowledge of developing dashboards and visually presenting high data volumes on online platforms an added advantage.
- Experience with using iterative and incremental methods and TDD and/or BDD
- Very strong programming skills proven experience writing maintainable code in at least 2 of these languages: PHP, C#, C++, Java.
- Knowledge of RDBMS; MySQL, PostgreSQL. (*Experience with Document databases e.g. MongoDB added advantage*)
- Very strong HTML5/CSS3/JavaScript skills (knowledge of server-side JavaScript runtime an added advantage)
- Proven Experience working with at least 2 of these frameworks: Laravel, ASP .NET, Java Spring
- Resourcefulness and problem-solving aptitude
- Experience with Python, Perl, Bash Scripting etc is an added advantage.
- Solid understanding of asynchronous programming
- Experience with data mapping and visualizing libraries e.g. GoogleMaps API, D3.js, LeafletJS
- Excellent debugging and problem-solving skills
- Ability to work closely and efficiently as part of a multinational team
- Fluency in English (written and spoken).

SPECIAL REQUIREMENTS:

- Excellent writing, communication and presentation skills.
- Ability to work effectively under pressure.
- Ability to maintain pleasant working relationships with individuals of different national and cultural backgrounds.
- Willingness to international travel.
- Experience in similar position with regional or international organizations is preferred.

APPLICATION PROCESS:

- The deadline for applications is **19th of October 2018**

- Applicants should send a cover letter and a CV with details of relevant experience and three traceable referees
- Applications should be sent to:

The Executive Director, Dr. Jane Olwoch
SASSCAL Regional Secretariat
28 Robert Mugabe Avenue (Corner of Robert Mugabe and Newton Street)
P. O. Box 87292
Windhoek
E-mail: mattie.otto@sasscal.org

Please note that only short-listed applicants will be notified by the 9th of November 2018
For further information, please visit www.sasscal.org
