

### **Background**

Akros is a cutting edge organization that establishes data-driven systems to improve the health and well-being of disadvantaged communities. We pride ourselves in our ground-level knowledge of the service delivery systems where we work, and our ability to provide novel, lasting solutions implemented in developing regions. Our technical emphasis leverages open-source technology for community-led development. Projects range from supporting Community-Led Total Sanitation, to national Health Information Systems strengthening, to malaria case detection via mobile phone, to electronic data reporting for rural school administrators. The breadth of Akros' projects has enabled our teams to establish working relationships at the sub-national and community levels in every province in Zambia (across nearly 40,000 villages) as well as at the central level in Angola, Botswana, Malawi, Mozambique, Namibia, South Africa, Swaziland and Zimbabwe. Akros staff members work with a broad range of donors, partners and stakeholders to pursue this mission, including USAID, UNICEF, SightSavers, government officials and traditional leaders.

Although we work across the Southern Africa region, Akros is a partnership between Akros, Inc, registered as a small, woman-owned, business in the U.S., and Akros Research, an NGO registered in Lusaka, Zambia. The majority of Akros' employees reside in Zambia and work from Lusaka HQ.

Akros is seeking an Informatics Program Associate to support data collection and data transmission activities in Lusaka, Zambia. Since Akros programs constantly shift and grow, this Associate must be willing and able to independently develop flexible technical solutions that can quickly adapt and scale. The position is expected to be about 70% computer programming and system testing, with 30% R&D (innovation, business development, and learning). S/he will work under the oversight of Akros' Senior HMIS Advisor, who is also based in Lusaka.

### **Responsibilities**

#### ***Programming, Database Architecture, and System Maintenance***

- Configure, customize, test, and deploy new databases, such as DHIS2, Open Data Kit, iHRIS, and/or OpenMRS
- Manage and monitor mobile data transmission from diverse stakeholder base
- Install, maintain, troubleshoot, and update operating systems and user applications
  - Train managers to optimize surveillance systems to adapting needs
  - Conduct quarterly system audits to keep systems functioning optimally
  - Handle bug fix requests or system improvement requests
  - Recommend system changes as programming requirements change over time
- Work with programme managers to fully understand the systems and end-users, documenting these and adapting theories of change accordingly
- Test new applications and provide thorough feedback

- Create custom data transmission tools for Akros programs, including but not limited to, custom indicators in DHIS2, data transmission through automated HTML report, configuring of mobile J2ME applications, object-relational mapping between database systems, and capturing/importing of village coordinates

#### ***R&D, Innovations, and Feature Development***

- Contribute to Informatics Research & Development meetings to brainstorm and document practical applications for development informatics
- Provide technology strategy assistance including, but not limited to, researching solutions, engaging with potential vendors or solutions, making recommendations for technical approaches
- Train employees and partners on software and ICT systems.
- Employ “Systems Thinking” and “Design Thinking” approaches to complex data collection and data dissemination challenges in low-resource contexts
- Contribute to technical concept development to facilitate Business Development process
- Create novel applications and widgets for Akros systems, pushing final release to core code of open source platform
- Other duties as assigned

#### **Minimum Qualifications**

- Bachelors degree (required) or Masters degree (preferred) in Computer Science, Information Technology, or other related focus
- At least 2-5 years computer programming or database administration experience. Tasks should include development of custom HTML reports from API outputs, interactive data visualization, data extraction through scripting in PostGres or another object-relational database, and execution of coding tasks in at least one higher-order and object-oriented languages (e.g. Python, Javascript, Java, PHP, Ruby).
- Experience in data management software such as R, SQL, STATA, SAS
- Ability to lead in a multicultural environment and motivate other staff to excel
- Self-starter who will thrive through exemplifying ownership and initiative. Candidate should be highly productive and internally motivated
- Demonstrated ability to work well against complex and challenging delivery schedules

#### **Preferred Qualifications**

- Preference given to candidates with advanced knowledge of Extract Transform Load (ETL) technologies, SMS gateway APIs, data migration across platforms, Hadoop or other “big data” engines, machine learning approaches, and/or agile app development methodologies
- Familiarity with DHIS2 database structure and Java Runtime Environments a plus
- Familiarity with Open Data Kit, Tableau, KoboToolBox, OpenMRS, iHRIS, Frontline SMS, ArcGIS, and/or Commcare a plus
- Experience leading technical software trainings, technical documentation, or knowledge management a plus
- Experience in health informatics a plus

**Location, Term, and Travel**

This position is based in Lusaka, Zambia, is open to either international or local candidates, and will be for a period of 12 months beginning immediately. (Extensions may be available contingent upon performance and funding). The position will require about 10% travel to communities that benefit from Akros programs, either in rural Zambia or abroad.

**Application Instructions**

Candidates will be interviewed on a rolling basis and are encouraged to apply early. To apply, please submit a cover letter and CV with references to [careers@akros.com](mailto:careers@akros.com) with "Application: Informatics Program Associate" as the email's subject line.