Senior Data Lead

Reportsto: Director of Digital Solutions
Location: Stone Town, Zanzibar (may be asked to work remotely until it is safe to relocate to Zanzibar due to COVID-19)
StartDate: June/July, 2020 (with some flexibility)

Who we are
D-tree International is a leading digital health organization. We work to improve the quality of health systems in low and middle-income countries by exploiting digital technology in innovative ways. We are an interdisciplinary organization, working at the intersection of global health and technology. Expertise in both domains is essential to design and deploy systems which are both appropriate to particular contexts and effective in improving health outcomes. Our work is diverse, ranging from developing tools supporting governments to engage with the private sector in Liberia, to an emergency referral system providing life-saving emergency transport to women and babies in Tanzania. We are currently supporting the Ministry of Health in Zanzibar to implement a national digitally-enabled community health system which will utilize digital tools for more than 2,000 community health workers and their supervisors to provide community-level health services at scale. These systems are cost-effective, significantly improve health systems and save lives. We are well positioned to expand our reach and impact throughout Tanzania in 2020 and beyond. Furthermore, this system collects millions of data points each month and offers exciting potential to exploit this data to improve program quality and contribute to global evidence.

Who you are
We are seeking a full-time Senior Data Lead to work closely with our program teams, technology team, government stakeholders, external research, technology and development partners, to help us and our stakeholders gain insights from the data collected in our programs and make sure this data is used by the relevant decision makers to strengthen the health systems we work in.

You have a love for data and are curious and inquisitive to ask the important questions our data can answer. You are excellent at communicating with technical and non-technical stakeholders, with data users and related stakeholders to make sure they have the right data at the right time. For example, you will help develop models that predict which children in a village will require additional support to reach their growth targets, before they are born. Your experience with data and information visualization helps you decide what are the best data presentations for different users and different questions. You have a sound knowledge of privacy and data protection issues, and related regulations and best practices. You have a sound knowledge of statistical and machine learning concepts and are comfortable discussing these with our research partners or build and evaluate our own models. You like working with non-technical stakeholders such as our program team or government partners to help them articulate their requirements and evaluate them once they have been implemented.

What you will do
Your main role will be to work with the different data stakeholders inside and outside of D-tree to make sure the data collected by D-tree and stakeholder programs is used effectively and efficiently.

Data management, data protection and privacy
- Lead D-tree’s efforts on data protection and privacy.
- Develop and implement strategies, policies and procedures for effective data management.
- Create and implement rules and procedures for data quality assurance and data sharing.
- Oversee and manage staff members in the daily use of data systems.
- Together with our Compliance Manager, guarantee adherence to legal and organizational regulations.

Data analysis and visualization
- Create and implement analytical models into production by collaborating with software developers using state-of-the-art machine learning methods.
- Support our M&E team to enhance data collection procedures to include information that is relevant for building analytic systems.
• Lead processing, cleansing, and verifying the integrity of data used for analysis.
• Design and lead the creation of dashboards and other data tools for internal and external stakeholders.
• Extend our data with third-party sources when needed.

Project and Partner Management
• Identify, establish and manage partnerships with data-focused organizations, including research institutes, NGOs or private sector organizations.
• Be D-tree’s main point of contact for external partners that collaborate on data-centric projects, for example to build predictive models based on program data and integrate these into digital tools.
• Regularly report on project activities and results to the project team and donors, including in routine quarterly and annual reports and other reporting requirements as requested.
• Support program and project managers on data-centric aspects of our programs.
• Facilitate communication and processes between the program and the software engineering team.

Learning and dissemination
• Actively participate in relevant technical working groups and professional forums representing D-tree.
• Identify strategic directions for data use in global digital health.
• Document successes, lessons learned and challenges.
• Author/co-author abstracts, presentations, and articles for journals and conferences to disseminate best practices, learning, and achievements.

Who we are looking for
We are looking for a motivated individual who is willing to wear multiple hats and do what it takes to make our programs succeed. At D-tree we are trying to push the envelope regarding what is possible with digital health systems, while working in environments with extreme constraints. We are looking for an individual who is creative, flexible, and who takes initiative to identify and act on opportunities to strengthen the quality of and innovation in our programming.

Essential qualifications
• Master’s degree or PhD with a focus in data science, computer science, mathematics, statistics, or other relevant quantitative disciplines.
• At least 5 years of relevant work experience.
• At least 2 years of work experience that required a high level of self-management with minimal supervision and included a variety of assignments often under pressure of deadlines.
• Experience querying large datasets and proficiency with relational and NoSQL databases.
• Experience developing and training others to use dashboards and other data-based decision support tools.
• Extensive experience working in intercultural teams and adapting to cross-cultural norms.
• Excellent intercultural communications skills. Able to communicate with technical and non-technical audiences.
• Team player able to work in high-pressure environment and manage multiple activities and priorities simultaneously.
• Ability to lead and work effectively with an interdisciplinary team with minimal supervision.
• Willingness to contribute to D-tree’s mission by occasionally conducting tasks that go beyond the job description.
• High level of attention to detail and excellent organizational and time management skills.
• Proficient spoken and written English.
• Experience living in a low- or middle-income country similar to Zanzibar a major asset.
• Ability and willingness to travel nationally and internationally as necessary.

Preferred qualifications
• Experience working as a product owner, business analyst or in a similar role that requires facilitating communication and work processes between non-technical clients and a software engineering team.
• Knowledge of a variety of machine learning techniques (clustering, decision tree learning, artificial neural networks, etc.) and their real-world advantages/drawbacks.
• Knowledge of advanced statistical techniques and concepts (regression, properties of distributions, statistical tests and proper usage, etc.) and experience with applications.
• Experience conducting analysis in the fields of health informatics, health economics or other public health areas.
• Experience working with Ministry of Health staff and other government stakeholders.
• Experience with Health Information Systems.
• Experience working with and creating data architectures.
• Experience with DHIS-2.
• Experience working as part of a small software engineering team.
• Experience designing and implementing mobile data collection tools, and mobile data verification strategies.
• Experience supporting humanitarian or development programs.
• Knowledge of Swahili preferred (if not, a strong willingness to learn is essential).

**Application information**
To apply for this role please fill in the [form](#).

**Deadline for applications:** open until filled. D-tree International is an equal opportunity employer.