Artificial Intelligence (AI) and Data Intern

Posting Date: February 2, 2023
Application Deadline: 10th Feb 2023
Position Type: Full-time
Company/Division: inSupply Health Ltd
Hiring Manager: Senior Advisor MLE
Location: Nairobi, Kenya
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Description:

inSupply Health is an East African health advisory firm that designs people-centered, scalable, sustainable supply chain solutions. We focus on optimizing data visibility and use, workforce development, and continuous performance improvement. inSupply operates as a social enterprise, aiming for business sustainability while achieving our social mission. We aim to transition short term supply chain fixes into sustainable solutions that transcend specific projects or funding streams. Our work focuses on democratizing access to quality, affordable, contextualized supply chain learning and innovations so local and regional supply chain actors can improve the performance and efficiency of their supply chains and health systems towards better health outcomes.

inSupply Health is headquartered in Nairobi, with an office in Dar es Salaam and is affiliated with JSI Research & Training Institute, Inc. (JSI). Our team of dynamic local consultants works closely with public and private sector clients to design optimized, responsive and resilient supply chain systems that deliver essential health products such as antimalarial and HIV medications, vaccines and contraceptives in complex settings. We pioneer innovative approaches by taking proven methodologies from the commercial sector to adapt them for the context, but also co-create solutions with our clients so they can own, implement and continuously improve their systems independently in the long term.

inSupply's work and partnerships with MOH in Kenya and Tanzania have offered an opportunity to begin the stepwise approach of starting with simple AI enhancements to the quantification process and building towards more complex AI-enabled decision-making and institutionalization. While both countries have made inroads in prioritizing quantification at national and subnational levels, important gaps in process, capacity and outputs remain. In Kenya, despite highly devolved administrative and health structures across 47 counties, forecasting and quantification methodologies for programs have not evolved to reflect new opportunities, structures, needs and capacities. Programs that received donated commodities (e.g. family planning, malaria etc) develop annual forecasts, often using limited methodologies with only one or two data sources. Tanzania introduced a bottom-up approach (aggregating forecasts from health facilities to obtain subnational and national level forecasts) to quantification for essential health commodities aiming to improve forecasting accuracy. Having

a more robust and automated methodology, enhanced by advanced analytics and AI, would help flag potential gaps in the new bottom up approach to minimize this risk. Tanzania has already started the process of planning for integrating AI into its systems.

Who we are looking for:

inSupply has specifically designed its internship program to offer recent graduates a rich, holistic learning experience that is geared towards building professional and technical skills in supply chain, data use, curriculum and learning packages development and scaling technology in the public health space. inSupply's internship program has been running since 2017.

The program operates as follows:

- The intern is offered a position for three months, provided a scope of work and onboarding and orientation, and works closely with a team and supervisor for the first three months. The intern is required to complete key e-learning courses (including Introduction to Supply Chain Management and IMPACT Team learning packages) during this period. The supervisor conducts an evaluation and based on the intern's general performance at the end of the three-month period, the internship may be extended for another three months.
- At the end of the second three-month period, another evaluation is conducted and inSupply makes its best effort to place suitable, strong candidates in longer-term positions.

The internship program aims to build innovative and critical thinkers, using immersion in our various projects as the learning process. We aim to partner with training institutions and universities to routinely offer the program with the aim of building a local, Kenyan and Tanzanian pool of talent around data use, analytics, supply chain and continuous improvement. inSupply offers hands-on experience along with a structured mentorship and learning program to build capacity in design thinking, project management, data analysis and documentation of learnings and best practices.

The ideal intern candidate is enthusiastic, has a "can do" attitude, an eagerness to learn and a curious mind, and is willing to do a broad array of tasks to further their professional and personal growth. They demonstrate a strong work ethic, are proactive in shaping their learning and offering support to the team and make a best effort to work across all areas of inSupply's work to maximize learning.

Responsible for (but not limited to):

Work closely with inSupply Health's MLE and supply chain teams to:

- Use robust, data-driven methods complemented by user-centered, actionable visualizations of data.
- Working with stakeholders at all levels of the supply chain to create a "data culture" by empowering and training staff to analyze and use data for decision making to improve supply chain performance.
- Build on the work that has already been done by deploying a stepwise process for integrating AI approaches into existing systems to strengthen data culture and help establish a practice of AI-enabled decision making and supply chain planning.
- Accurately forecast product demand as a critical step in building healthy supply chain systems that provide a consistent supply of products to adequately meet the needs of the end users.
- Begin the stepwise approach of starting with simple AI enhancements to the quantification process and building towards more complex AI enabled decision making and institutionalization.
- Develop an Artificial Intelligence playbook that describes best-practices for implementing advanced analytics and AI into health commodity quantification (forecasting, supply planning, data extraction, cleaning) in Kenya and Tanzania
- Pilot test and validate AI solutions and data use processes at national and sub national level. Gather insights from users, iterate, and refine.
- In the immediate term, seek to improve access to and use of AI at central and subnational levels in quantification, specifically in the areas of forecasting and supply planning with an aim to improve efficiency of the process, quality of the data and outputs, and enhanced national and subnational decisions.
- collaboratively develop an implementation strategy with stakeholders that will identify realistic goals along with a road map providing clear guidance on how to best achieve adoption of more complex predictive models and advanced analytics to enhance current business processes
- Promote innovation and progress and a longer term vision for AI enhanced decision making by laying the groundwork for how intelligent forecasting methods can predict commodities consumption and service needs of Kenya and Tanzania.
- Work with stakeholders at national and subnational level to identify areas where AI can provide added value, design and test AI methodologies and use of the outputs, measure and document the achievements, benefits and lessons learned, and identify opportunities for the future.
- Support training and other activities geared to strengthening the county and sub county supply chain.
- Assist in organizing internal team meetings, including developing agendas, arranging logistics, taking/circulating meeting notes and updating action items.
- Assist with the planning, preparation, and logistics for workshops and stakeholder meetings and also travel to support workshops as needed.
- Participate in weekly and monthly inSupply team meetings with the Tanzania, Kenya and US colleagues, providing activity updates and supporting logistics as required.

- Support data and document gathering, systematic note taking, organization and visualization of information as requested.
- Other duties as assigned.

Skills and Qualifications:

- Graduated not more than two years from the date of advertisement of this post.
- Bachelor's degree in Health related field, Computer Science or Data Science, Mathematics, and Statistics.
- 1+ years working with Artificial Intelligence / Machine Learning tools and technique is highly desirable
- 1+ years of experience in data analytics using R-Program is required
- Experience in statistical data analysis software such as Stata, SPSS, and Advanced excel is desirable.
- Ability to work comfortably in the MS Office package, with advanced knowledge of Excel and PowerPoint a requirement.
- Excellent analytical skills with ability to work with large amounts of information and see the 'bigger picture.
- Excellent relationship management skills.
- Comfortable with juggling facts, figures, and number crunching.
- Strong interest and some basic experience in data, analytics with an affinity for numbers.
- Interest and willingness to learn qualitative data analysis and approaches to learning.
- Excellent writing, verbal and written communication, and organizational skills.
- Attention to detail, ability to prioritize multiple tasks, critical thinking, initiative, ability to meet deadlines and innovation
- Interest in health, and/or development issues.

Application process

To apply please submit your application to **recruitment@insupplyhealth.com** with **AI and Data Analytics Intern** as the subject. Your application should include your current CV and Cover letter (describing why you think you're a good fit for this role). inSupply is an equal opportunity employer. We value diversity and we are committed to creating an inclusive environment based on mutual respect for all employees. We do not discriminate on the basis of age, sex, disability status, religion, ethnic origin, color, race, marital status, or other protected characteristics.