United Nations Children's Fund
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for every child

CONSULTANCY - TERMS OF REFERENCE

Data Analyst (Intern)

Division: Giga
Duration: up to 6 months
Duty Station: Remote

Advertising summary

We are seeking an intern to assist in various data analysis priorities of the Giga initiative, a joint partnership between UNICEF and ITU. The intern will collaborate with the Data & Mapping product team, Country engagement teams, as well as external partners to develop innovative products and data solutions for the Giga Initiative.

UNICEF works in some of the world's toughest places, to reach the world's most disadvantaged children. To save their lives. To defend their rights. To help them fulfil their potential. Across 190 countries and territories, we work for every child, everywhere, every day, to build a better world for everyone.

And we never give up.

For every child…

UNICEF has a 70-year history of innovating for children. We believe that new approaches, partnerships and technologies that support realizing children's rights are critical to improving their lives.

UNICEF and ITU have launched **"Giga"**, a new initiative to connect every school to the internet, and every young person to information, opportunity and choice. It also serves as a platform to create the infrastructure necessary to provide digital connectivity to an entire country, for every community, and for every citizen.

Providing connectivity to the world remains a challenge. According to the ITU, nearly 3.7 billion people remain unconnected from the internet, and by extension, unconnected to digital products and services that could dramatically improve their lives. Approximately 29% of 18-24-year-olds, most of them in Sub-Saharan Africa, do not have digital access (~360m people) and thereby lack access to the same information, opportunity and choice as their more-connected peers. Unless things change, a big part of this rapidly growing group of young people is in danger of being left behind, excluded from the modern digital world.

Closing the digital divide requires global cooperation, leadership, and innovation in finance and technology. Giga leverages data, innovative finance and new technologies to bring the power of meaningful connectivity to fast-track young people's access to educational resources and opportunities.

How can you make a difference?

We seek a strong self-motivated candidate with data analysis experience who can produce detailed data analysis reports, even under tight time constraints, and can work with a diverse team to drive the giga project forward, using data-driven insights.

This candidate will support the data and mapping team build a suite of analytics tools, such as dashboards and ad-hoc pieces of geospatial and real-time data analytics, to help support in-country officers and help actualize Giga's ambitious goal of connecting every school, and every community to the Internet.

The team is looking for a candidate with some experience running time-series analytics, including geospatial data and who can prepare reports using open-source tooling to help monitor school connectivity. The ability to work freely with both python and PostgreSQL as well as contribute to documentation and data quality standards.

Your main responsibilities include:

- Work closely with the data & mapping product team to support data analysis on both real-time and geospatial datasets.
- Support the creation of analytical reports to be used by country teams for monitoring project engagement and implementation.
- Assist in writing documentation and forming research questions for the data science team to test.
- Assist with product design on gigas data products.

Description of assignment

	Tasks	End Product/ Deliverables	Time Frame
1	**Build and Maintain reporting dashboards**	- Analytical dashboard of schools and their parameters across time and countries. - Materials to help onboard non-tech teams and country offices.	Month 1
2	**Deep-dive country analytics**	- Analytics reports into key countries within the giga project and become a "master of data" for these locations - Generate country-specific insights, providing context for wider analysis as well as understanding of country specific patterns and challenges	Month 2
3	**Product analytics**	- Product and user analytics dashboards for our mapping products like Project Connect and Daily Check App. - Documentation with product and process improvements based upon the analysis.	Month 3
4	**Forecasting**	- Time-series modelling to help giga better understand the correlation / impact of key data points and make predictions of future behaviors for early issue detection - provide basis for further research with Data Science team	Month 4

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5	**Data Quality standards and automation support**	- Support the evaluation of data pipelines and code with data quality assertions to help automate and build robust data pipelines.	Month 5
6	**Data Governance**	- Data documentation and metadata for key datasets. - data documentation and metadata templates.	Month 6

To qualify as an advocate for every child you will have…

- Be enrolled in a graduate degree programme in Computer Science, Engineering or other relevant field or have graduated within the past two years.
- Experience with data visualizations
- Experience with data modelling
- Experience with geospatial data processing
- Interested in Time-series data, internet measurements context or social-economic analysis
- Experience with product analytics
- Technical experience in:
- Languages: python, Jupyter Notebooks, R,
- Cloud services: Azure, AWS, etc
- Geospatial DBs, libraries and data structures
- Data visualization libraries
- Sql and NoSQL database systems
- Experience with git, pull requests
- Applicants must be at least 18 years old.
- Be proficient in at least one of UNICEF's working languages: English, French or Spanish. Fluency in the working language of the office you are applying to is required.
- Have excellent academic performance as demonstrated by recent university or institution records.
- Have no immediate relatives (e.g. father, mother, brother, sister) working in any UNICEF office; and have no other relatives in the line of authority that the intern will report to.