CONSULTANCY - TERMS OF REFERENCE

Giga Research Lead (Technology)
UNICEF Office of Innovation - Giga
Duration: 12 months
Duty Station: Barcelona, Spain

Advertising summary

Giga seeks a Research Lead (Technology) to join one of the most innovative and impactful initiatives at the United Nations whose aim is to connect every school in the world to the Internet and every young person to information, opportunity and choice.

Located within UNICEF’s Giga team, this role focuses on advancing data and technology through research in areas like AI, blockchain, and machine learning on satellite imagery.

Research Lead (Technology) will lead a team to drive technological innovations and deliver insights that support Giga’s strategic decisions, optimizing connectivity and developing advanced technology solutions. Under the guidance of the Innovation Manager, this role is critical in shaping the future of global educational connectivity and technological deployment.

Child Safeguarding

Is this project/assignment considered as “Elevated Risk Role” from a child safeguarding perspective? ☐ YES  ☑ NO

If YES, check all that apply:

Direct contact role  ☐ YES  ☑ NO
If yes, please indicate the number of hours/months of direct interpersonal contact with children, or work in their immediately physical proximity, with limited supervision by a more senior member of personnel:

Child data role  ☐ YES  ☑ NO
If yes, please indicate the number of hours/months of manipulating or transmitting personal-identifiable information of children (name, national ID, location data, photos):

More information is available in the Child Safeguarding SharePoint and Child Safeguarding FAQs and Updates

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 fulfill 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...innovate**

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.

The **Office of Innovation** is a creative, interactive, and agile team in UNICEF. We sit at a unique intersection, where an organization that works on huge global issues meets the start-up thinking, the technology, and the partners that turn this energy into scalable solutions.

**About Giga**

Launched in 2019 as a joint initiative between UNICEF and ITU, **Giga** has set the ambitious goal to connect every school in the world to the internet. Half of the world’s population has no regular access to the Internet. Millions of children leave school without any digital skills, making it much more difficult for them to thrive and contribute to local and global economies. This has created a digital divide between those who are connected and those who are not, a divide that has become even wider during the Covid-19 pandemic. UNICEF and ITU have therefore joined forces to create **Giga**, an initiative to connect every school in the world to the Internet and address this new form of inequality.

**Giga** focuses on connecting schools so that children and young people have access to information, opportunity, and choice. It also uses schools as anchor points for their surrounding communities: if you connect the school, you can also connect local businesses and services. This creates opportunities for service providers to generate revenue from paying users, making connectivity more sustainable. A 2021 report by the Economist Intelligence Unit found that a 10% increase in school connectivity can increase effective years of schooling by 0.6% and increase GDP per capita by 1.1%.

You can read more about Giga’s work at [https://giga.global](https://giga.global) and by following us on twitter @Gigaglobal

**How can you make a difference?**

Giga seeks a Research Lead (Technology) to join one of the most innovative and impactful initiatives at the United Nations whose aim it is to connect every school in the world to the Internet and every young person to information, opportunity and choice.

Located within UNICEF’s Giga team, this role focuses on advancing data and technology through research in areas like AI, blockchain, and machine learning on satellite imagery.

The Research Lead (Technology) will lead a team to drive technological innovations and deliver insights that support Giga’s strategic decisions, optimizing connectivity and developing advanced technology solutions. Under the guidance of the Innovation Manager, this role is critical in shaping the future of global educational connectivity and technological deployment.

Under the supervision and guidance of the Innovation Manager, the Research Lead (Technology) will play a key role in setting the direction of research areas within UNICEF’s Giga team.
Your main responsibilities will be:

1. **Team Leadership and Management**: Lead a dynamic team of researchers, fostering professional development and ensuring alignment with organizational goals.
2. **Research Strategy Development**: Develop and execute research strategies that leverage AI, blockchain, and other emerging technologies to support Giga’s mission.
3. **Project Oversight**: Manage the full lifecycle of research projects from planning through execution and completion, ensuring efficiency and effectiveness.
4. **Collaboration Enhancement**: Build and maintain academic and industry partnerships to enhance research quality and applicability.
5. **Cross-Functional Integration**: Work closely with product management, procurement, and business development teams to integrate research findings into practical applications.
6. **Insight Generation**: Synthesize research data into actionable insights and strategic recommendations.
7. **Communication and Dissemination**: Communicate research outcomes to both internal stakeholders and the broader community to influence and inform on Giga’s advancements.

### Description of assignment

<table>
<thead>
<tr>
<th>#</th>
<th>Tasks</th>
<th>Deliverables/Outputs</th>
<th>Delivery deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Develop annual research strategy</td>
<td>Comprehensive research strategy document</td>
<td>Month 1</td>
</tr>
<tr>
<td>2</td>
<td>Initiate the first set of research projects</td>
<td>Project plans and timelines established</td>
<td>Month 2</td>
</tr>
<tr>
<td>3</td>
<td>Establish new academic partnerships</td>
<td>Signed agreements with academic institutions</td>
<td>Month 3</td>
</tr>
<tr>
<td>4</td>
<td>Integrate research insights with product management</td>
<td>Initial report on product feature enhancements</td>
<td>Month 4</td>
</tr>
<tr>
<td>5</td>
<td>Mid-year review of research progress</td>
<td>Progress report and adjustment plan</td>
<td>Month 5</td>
</tr>
<tr>
<td>6</td>
<td>Enhance collaboration mechanisms</td>
<td>Implementation of new collaborative tools and practices</td>
<td>Month 6</td>
</tr>
<tr>
<td>7</td>
<td>Conduct market analysis for emerging technologies</td>
<td>Market analysis report completed</td>
<td>Month 7</td>
</tr>
<tr>
<td>8</td>
<td>Prepare research findings for publication</td>
<td>Draft papers for scientific journals</td>
<td>Month 8</td>
</tr>
<tr>
<td>9</td>
<td>Organize workshop with industry experts</td>
<td>Workshop held and summary report produced</td>
<td>Month 9</td>
</tr>
</tbody>
</table>
To qualify as an advocate for every child you will have…

- An advanced degree, or equivalent, in Computer Science, Physics, Mathematics, Engineering, Data Science.
  *A first University Degree in a relevant field combined with 2 additional years of professional experience may be accepted in lieu of an Advanced University Degree.
- Minimum 5 years of professional work experience in technological research and development, with specific expertise in Artificial Intelligence, blockchain, machine learning, or geospatial analysis, including demonstrated experience in leading research teams and managing multiple high-impact projects.
- In-depth understanding of emerging technologies and their applications, particularly in areas such as Artificial Intelligence, blockchain, machine learning, or geospatial analysis.
- High-impact publications on Computer Vision, Machine Learning, blockchain, or other technologies are an asset.
- Demonstrated experience leading and managing a team of researchers in a dynamic and fast-paced environment.
- Strong project management skills with the ability to oversee multiple research projects simultaneously.
- Strong analytical and problem-solving abilities, with the capacity to synthesize complex research findings into actionable insights and recommendations.
- Experience working with technology private sector companies is an asset.
- Experience working in start-up settings is an asset.
- Excellent written and verbal communication skills, with the ability to effectively communicate research findings, insights, and recommendations to diverse audiences, including senior management, technical experts, and non-technical stakeholders.
- Experience working with development or humanitarian programmes. Familiarity with the UN system and UNICEF is desired.
- Experience working in a multidisciplinary, multicultural team and with levels of uncertainty.
- Fluency in English is required, fluency in Spanish is highly desired. Knowledge of another official UN language (Arabic, Chinese, French, Russian) or a local language is an asset.

Travel:
- The consultant is expected to travel to Geneva on two (2 trips), for a stay of 4-5 nights.
- The consultant is responsible for arranging his/her own travel, including visa and travel insurance.

Payment details and further considerations
- Payment of professional fees will be based on the submission of agreed deliverables. UNICEF reserves the right to withhold payment in case the deliverables submitted are not up to the required standard or in case of delays in submitting the deliverables on the part of the consultant.
Consultant is responsible for his/her own health and travel insurance.
Consultant is responsible to arrange his/her own travel, including visa.

How to apply:
- Interested applicants are required to submit a financial proposal with an all-inclusive fee. Please see the financial proposal template.
- Financial proposal must include travel costs (economy class) and daily subsistence allowance, if travel is required as per TOR and any other estimated costs: visa, travel/health insurance.
- Applications without a financial proposal will not be considered.

For every Child, you demonstrate…

UNICEF’s values of Care, Respect, Integrity, Trust, Accountability, and Sustainability (CRITAS).

To view our competency framework, please visit here.

UNICEF is here to serve the world’s most disadvantaged children and our global workforce must reflect the diversity of those children. The UNICEF family is committed to include everyone, irrespective of their race/ethnicity, age, disability, gender identity, sexual orientation, religion, nationality, socio-economic background, or any other personal characteristic.

UNICEF offers reasonable accommodation for consultants/individual contractors with disabilities. This may include, for example, accessible software, travel assistance for missions or personal attendants. We encourage you to disclose your disability during your application in case you need reasonable accommodation during the selection process and afterwards in your assignment.

UNICEF has a zero-tolerance policy on conduct that is incompatible with the aims and objectives of the United Nations and UNICEF, including sexual exploitation and abuse, sexual harassment, abuse of authority and discrimination. UNICEF also adheres to strict child safeguarding principles. All selected candidates will be expected to adhere to these standards and principles and will therefore undergo rigorous reference and background checks. Background checks will include the verification of academic credential(s) and employment history. Selected candidates may be required to provide additional information to conduct a background check.

Remarks:

Only shortlisted candidates will be contacted and advance to the next stage of the selection process.

Individuals engaged under a consultancy or individual contract will not be considered “staff members” under the Staff Regulations and Rules of the United Nations and UNICEF’s policies and procedures, and will not be entitled to benefits provided therein (such as leave entitlements and medical insurance coverage). Their conditions of service will be governed by their contract and the General Conditions of Contracts for the Services of Consultants and Individual Contractors. Consultants and individual contractors are responsible for determining their tax liabilities and for the payment of any taxes and/or duties, in accordance with local or other applicable laws.
The selected candidate is solely responsible to ensure that the visa (applicable) and health insurance required to perform the duties of the contract are valid for the entire period of the contract. Selected candidates are subject to confirmation of fully-vaccinated status against SARS-CoV-2 (Covid-19) with a World Health Organization (WHO)-endorsed vaccine, which must be met prior to taking up the assignment. It does not apply to consultants who will work remotely and are not expected to work on or visit UNICEF premises, programme delivery locations or directly interact with communities UNICEF works with, nor to travel to perform functions for UNICEF for the duration of their consultancy contracts.