

February 2024

Title: Emerging Technologies Research Support Intern

Bureau/Dept/Unit: BDT / DNS / DSD

Supervision: Head Digital Services Division

Duration: 11 months

Location: ITU Headquarters

ITU is the United Nations specialized agency for information and communication technologies – ICTs.

We allocate global radio spectrum and satellite orbits, develop the technical standards that ensure networks and technologies seamlessly interconnect, and strive to improve access to ICTs to underserved communities worldwide.

ITU is committed to connecting all the world's people – wherever they live and whatever their means. Through our work, we protect and support everyone's fundamental right to communicate.

Today, ICTs underpin everything we do. They help manage and control emergency services, water supplies, power networks and food distribution chains. They support health care, education, government services, financial markets, transportation systems, e-commerce platforms and environmental management. And they allow people to communicate with colleagues, friends and family anytime, and almost anywhere.

With the help of our global membership, ITU brings the benefits of modern communication technologies to people everywhere in an efficient, safe, easy and affordable manner.

ITU membership reads like a Who's Who of the ICT sector. We're unique among UN agencies in having both public and private sector membership. So in addition to our 193 Member States, ITU membership includes ICT regulators, many leading academic institutions and some 700 tech companies.

In an increasingly interconnected world, ITU is the single global organization embracing all players in this dynamic and fast-growing sector.

1. **Organizational Unit**:

The Telecommunication Development Bureau (BDT) is responsible for the organization and coordination of the work of the Telecommunication Development Sector (ITU-D) of the Union which deals mainly with ICT-focused development policies, strategies and programmes, as well as technical cooperation activities, to promote digital inclusion and drive digital transformation at community, country and regional levels. To effectively and efficiently serve the needs of ITU members, BDT is organized into four functional areas:

- Office of the Deputy to the Director and Field Operations Coordination Department

- Partnerships for Digital Development Department

- Digital Networks & Society Department

- Digital Knowledge Hub Department

The Digital Networks & Society Department (DNS) is responsible for BDT activities in the areas of spectrum management, network development, cybersecurity and emergency telecommunications. This department is also responsible for supporting ITU Member States in their transition to digital societies by providing tools and guidelines to address environmental challenges (in particular, climate change and e-waste), and for promoting innovation, ICT applications/services, digital inclusion and ecosystems, with the ultimate goal to 'leave no one behind'.

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| 1. **Organizational context:**   One of the strategic components of the ITU Digital Services and Applications (DSA) programme involves assisting governments with design, implementation, and scaling of cost-efficient, needs-based digital solutions and infrastructure that can meaningfully improve wellbeing and livelihoods of people. As part of this work, the Digital Services Division (DSD) is engaging in a range of projects and initiatives aimed at providing governments, communities, and partner organizations with relevant tools, technical capacity, know-how and operational support for improving availability and accessibility of digital services. One of the key focus areas are evidence-based applications of emerging and novel technologies that can meaningfully transform the ways in which essential services are delivered to users.  The DSD team cooperates closely with ITU Study Groups, other UN Agencies, and national institutions on analyzing effectiveness, requirements, and technical specifications of emerging technologies in the context of their applications for health, education, agriculture, governance, and other areas related to sustainable development and UN Sustainable Development Goals (SDGs). |

## **Terms of Reference / Internship Objective:**

The objective of this internship is to assist the DSD team with conducting data collection and research on emerging technologies with the aim to: (1) help assess their relevance and potential with regards to ongoing development assistance and digital transformation efforts; (2) identify use cases for concrete impact-oriented applications that could address existing needs of communities and / or institutions in countries. Core activities will involve conducting research tasks; providing support with drafting documents; communicating with DSD partners and colleagues within and beyond ITU; reviewing, preparing, and updating content on DSD webpages, administrative work in support of ongoing project, and more. The intern will also have the opportunity to engage in other workflows based on their interests and career goals.

Under the supervision of the GovStack ITU Team, the Intern will:

* Assist the DSD team with identifying, researching, and (potentially) testing accessible software and digital platforms that could aid ITU’s work in countries and help DSD to better assist digital transformation stakeholders through improved digital products and practices. Particular focus will be on innovative mobile applications, no- and low-code development platforms, chatbots, large language models, text to speech tools, text to image tools, data analytics and content management solutions, and decentralised distributed ledge technologies.
* Support the drafting of background documents, reports, concept notes, and other materials for both internal and external communication and exchange of insights on innovative technology use for public health, education, agriculture, and institutional governance.
* Help with documenting relevant information and insights from expert
* meetings, partner contributions, online materials, and other resources.
* Assist with developing and updating content for dedicated project webpages.
* Provide support with administrative assignments and tasks in the context of ongoing projects and initiatives.
* Assist with other information gathering, document management, and content development tasks as may be required by the DSD team.

1. **Competencies**

**Technical Competencies** *(Examples of technical competencies are knowledge of regulatory frameworks, ERP or project management methodologies, etc.):*

* Strong interest in digital technology applications in the context of sustainable development.
* Demonstrated research, data collection and information synthesis skills, including proficiency and experience in conducting online research.
* Prior experience in experimenting with or testing emerging technologies (e.g. as part of a university project, academic research, etc.), including proficiency in operating software applications (code or no-code), including installation, set-up, and use.
* Basic knowledge of programming languages is not a requirement but would be an advantage.
* Familiarity with relevant repositories (GitHub, Hugging Face, etc.) is desirable.
* Good writing skills (experience in drafting publications, research articles, or reports is desirable).
* Enthusiasm and drive to work and experiment while learning new skills is a requirement.

1. **Qualifications required**
2. **Education**:

Pursuing or completed a Master’s programme or last year of Bachelor’s programme in field relevant to project activities (computer science, web design, development studies, international relations, economics, communication, etc.).

**Work experience**:

No work experience is required.

1. **Languages:**  
   English at advanced level.
2. **Training and Learning Elements:**

The intern will acquire excellent knowledge and experience of:

* Digital innovations
* Digital service design and applications
* International collaboration on meaningful digital transformation