UN ENVIRONMENT PROGRAMME JUNIOR PROFESSIONAL
OFFICER REQUEST

General Information

Post Title: JPO, Associate Expert on Artificial Intelligence for Environmental Sustainability
Office/Division/MEA: Office of the Chief Digital Officer
Unit: Office of the Chief Digital Officer
Location: Nairobi, Kenya
Duration: 2 years with possibility of extension. The extension of appointment is subject to yearly review concerning priorities, availability of funds and satisfactory performance.

Background information on UN Environment and the requesting Unit

The United Nations Environment Programme (UNEP) is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations (UN) system and serves as an authoritative advocate for the global environment.

In February 2021, the UN Environmental Assembly approved a new Medium-Term Strategy for UNEP covering the period 2022-2025. The strategy commits UNEP to tackle the triple planetary crises faced by humanity: climate change, loss of biodiversity and toxic pollution. Within the strategy, a Digital Transformation cross-cutting enabling programme was also adopted to accelerate and scale environmental sustainability by applying data, digital technologies and solutions in UNEP's key activities. UNEP's Digital Transformation sub-programme works to accelerate and scale climate action, nature, protection, and pollution prevention through the innovative use of data and digital technologies in UNEP's activities. The need for innovation and collaboration in digital technologies is key to:

- build a digital ecosystem of data for the planet,
- shift market incentives and consumer behavior through digital channels and partnerships,
- enhance e-governance through inclusive policy development, digital literacy, innovation support and stakeholder engagement,
- transform UNEP into a fully data-driven and digital organization.

To achieve these digital transformation goals, UNEP has established a new director level position of Chief Digital Officer (CDO). The CDO reports to the UNEP Executive Director. The CDO offers advisory services to all thematic divisions and regions. It is supported by a distributed network of experts located in each regional office plus a network of focal points located in each division.

Why is the Junior Professional Officer requested/needed?

As digital transformation increasingly becomes a priority for member states and technology applications continue to emerge as solution for environmental challenges, UNEP is responding by growing its capacity to use digital for tackling the Triple Planetary Crisis. Therefore, the newly established Office of the Chief Digital Officer must continue to grow.

The requested Junior Professional Officer adds to the organization much needed human resources with the digital skills that will ensure UNEP is at the forefront of digital developments and therefore well equipped to achieve climate stability, living in harmony with nature and a pollution free planet in the digital age.

Supervision

The JPO will work under the direct supervision of the Chief Digital Officer (CDO).

The JPO and Supervisors will use Inspira, the UN Secretariat platform for online e-Performance, to structure the timing and methodology of feedback and tracking of performance. The performance evaluations will be made available to the donor Government.

Content and methodology of the supervision

The Subprogramme Coordinator for Digital Transformation will conduct an induction which includes:

- A formal brief on the organization.
- The staff in the Division and the functions of and Digital Transformation Subprogram.

The Junior Professional Officer will have monthly meetings with the CDO to discuss performance, assess accomplishments, review problems, discuss job satisfaction, and adjust the development plan and learning objectives. The CDO will provide guidance on the development of the workplan and project implementation.

This way, desired results and anticipated problems are discussed beforehand with the Junior Professional Officer. Regular feedback on the progress of activities is obtained by the CDO (supervisor) through review of work in process. The Junior Professional Officer is expected to carry out the duties under general supervision and to consult with the CDO on issues of policy or other sensitive matters. Results of each set of activities are reviewed on a monthly basis for assessing the attainment of objectives and quality of work as well as reviewing and when necessary, adjusting the workplan.

First appraising officer: Ms. Golestan Radwan
Title first appraising officer: Chief Digital Officer
Unit first appraising officer: Office of the Chief Digital Officer
Location first appraising officer: Nairobi, Kenya

Second appraising officer: Ms. Magda Biesiada
Title second appraising officer: Global Subprogramme Coordinator for Digital Transformations
Unit second appraising officer: Policy and Programme Division
Location second appraising officer: Nairobi, Kenya

Duties, responsibilities and output expectations

Terms of reference

The incumbent is expected to conduct the following task.

- Artificial Intelligence (AI) use case identification: Identify opportunities to pilot test different applications and use cases of AI to accelerate and scale solutions for climate security, living in harmony with nature, and a pollution free planet based on human-centered design. This includes planning and executing user consultations with different stakeholder groups.
- Build / prototype AI models: Develop AI prototypes based on the use cases identified, including the selection of appropriate technology, development of the data strategy associated with the product, as well as identification of implementation partners inside or outside the UN.
- Testing and reiterating prototypes: Establish success criteria and testing strategy for AI prototypes. Ensure reiterations and improvements are derived from lessons learned and testing feedback. Collaborate with implementing partners on technical aspects of the prototype.
- Research and development: Conduct research in support of UNEP policies and programmes, as well as publications on matters related to Artificial Intelligence and environmental challenges.
- Thought leadership: Together with senior data scientists and UNEP staff, write and publish content on topics such as the environmental aspects of Artificial Intelligence, responsible AI development, environmental and climate impacts of AI, etc.
- Knowledge diffusion and capacity building inside and outside UNEP: Update senior management, partners, or member state representatives on latest AI developments. Writing policy briefs on emerging trends in AI to spread knowledge on the role of this technology for environmental sustainability, as well as risks and ways to mitigate them. Advising and informing the development of AI projects for UNEP internal initiatives or partnerships with other organizations.

The Junior Professional Officer will be provided with regular feedback on his/her performance and progress, with special attention granted to goal setting and overcoming challenges.

Output expectations

The work of the Junior Professional Officer will contribute to the achievement of the following outputs:

- Publishing thought leadership pieces such as UNEP reports and other publications.

- Identifying use cases for AI that advance environmental goals.

- Developing AI solution prototypes that can solve environmental challenges.

- Improved delivery of technical advisory services and catalytic funds to UNEP on digital transformation and artificial intelligence in specific.

Travel

Missions and costs of travel envisaged during first year of assignment: Estimated 2 missions per year of on average 4 days.

Missions and costs of travel envisaged during second year of assignment: Estimated 2 missions per year of on average 4 days.

Missions and costs of travel envisaged during third year of assignment (if applicable): Estimated 2 missions per year of on average 4 days.

Training and Learning Elements

Training

The Junior Professional Officer will be offered the opportunity to undertake the following training courses:

- Results-based management training and career development planning: The Junior Professional Officer will be offered opportunities to participate in UNEP's results-based management training and undertake relevant training programmes organized by the UN system

- UN and UNEP's online training programmes: The Junior Professional Officer will be provided with the opportunity to undertake a variety of programmes provided by the UN and UNEP, on topics including data science, digital transformation, and innovation.

- On the job training: The supervisors of the Junior Professional Officer are committed to providing daily on the job training for the Junior Professional Officer's effective operation in the UN system. The JPO will also be exposed to senior data scientists, technical teams across the UN and external implementation partners for learning opportunities.

- Specialized training will be agreed upon in consultation with the supervisor

Learning elements:

After one year the Junior Professional Officer will be:

- Able to work with implementation partners.
- Having a good understanding of the UNEP programme planning cycle and the role of digital technologies to accelerate climate action, nature protection and pollution prevention.
- Able to provide project formulation, monitoring and reporting as evidenced by the ability to draft project concepts for use cases for environmental data or digital technologies.

After two years the Junior Professional Officer would:

- Independently manage the development of prototypes based on artificial intelligence that take into consideration environmental sustainability and involve several stakeholders and implementation partners.
- Having a good understanding of the different use cases for artificial intelligence and global needs for effective artificial intelligence governance.
- Be able to provide advisory services to UNEP programmes and projects on artificial intelligence opportunities and risks.
- Have knowledge of the UN system and have contacts in and outside the UN system.
- Gained understanding on multicultural work-environment, as well as familiarity with rules and regulations of the UN.
- Be able to independently design, develop and deliver policy briefs for decision making on artificial intelligence topics.
- Draft project concepts that can support the mobilization of financial resources.

After three years (if applicable), the JPO would:

- Have the ability to independently function as a professional in the field of digital sustainability specialized in artificial intelligence.
- Be ready for similar appointments in the UN system and other organizations of international repute.

Qualifications and experience

Qualifications

Education: Master's degree in environmental science, data science, digital transformation, or related field. A first-level university degree in combination with four years of qualifying experience may be accepted in lieu of the advanced university

degree. Previous experience with Agile methodology, IT project management or AI product management is an asset.

Skills

- Strong technical expertise in Artificial Intelligence.
- Good understanding of software engineering and development.
- Exposure to AI product management is a plus.
- Knowledge of Agile methodology.
- Excellent writing and presentation skills.
- Good data analysis and visualization skills. Statistical and geospatial analyses abilities are a plus.
- Knowledge of Microsoft Office 365.
- Knowledge of the theory of change and - results based management is seen as an asset.

Working experience

At least 4 years of experience at the national level, or 2 years at the international level of progressively responsible experience in the field of software engineering, digital transformation, data science, or similar field are required. Developing or using AI models, ideally for environmental or similar domains, is an asset. AI product management exposure would be beneficial.

Languages:

Fluency in oral and written English is required. Working knowledge of other UN languages is an asset.

Competencies

- Commitment to continuous learning: Keeps abreast of new developments in own occupation/profession; actively seeks to develop oneself professionally and personally; contributes to the learning of colleagues and subordinates; shows a willingness to learn from others; seeks feedback to learn and improve and keeps abreast of new developments in own occupation/profession.

- Teamwork: Works collaboratively with colleagues to achieve organisational goals; solicits input by genuinely valuing others' ideas and expertise; is willing to learn from others; places team agenda before personal agenda; builds consensus for task purpose and direction with team members; supports and acts in accordance with final group decisions, even when such decisions may not

entirely reflect own position; shares credit for team accomplishments and accepts joint responsibility for team shortcomings.

- Client orientation: Considers all those to whom services are provided to be "clients" and seeks to see things from clients' point of view; establishes and maintains productive partnerships with clients by gaining their trust and respect; identifies clients' needs and matches them to appropriate solutions; monitors ongoing developments inside and outside the clients' environment to keep informed and anticipate problems; keeps clients informed of progress or setbacks in projects and meets timeline for delivery of product or services to the client.

Living conditions at duty station

Normal living conditions for developing countries in Africa.