

## **UN ENVIRONMENT JUNIOR PROFESSIONAL OFFICER REQUEST**

### **General Information**

Post Title: Junior Professional Officer / Data Scientist

Office/division/MEA: Corporate Services Division

Unit: Enterprise Solutions Section

Location: Nairobi, Kenya

Duration: 2 years with possibility of extension for another year

### **Background information on UN Environment and the requesting Unit**

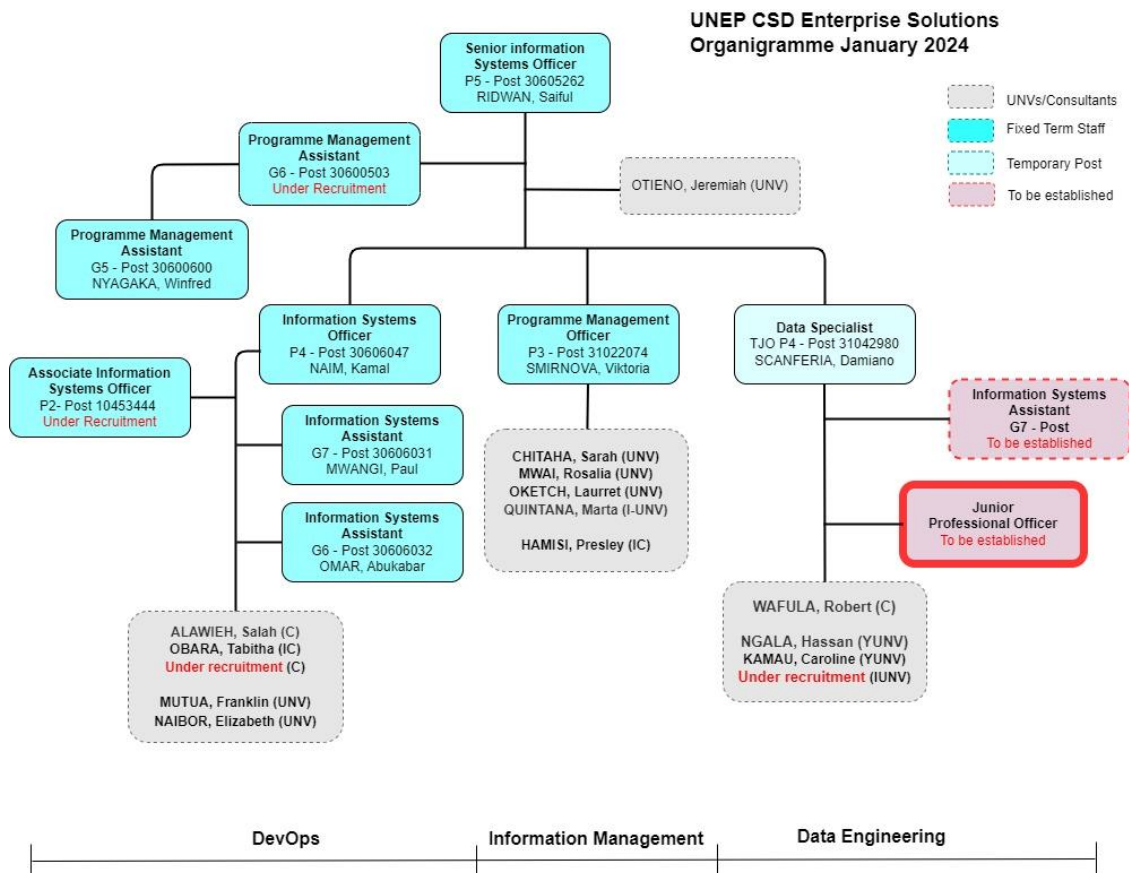
The United Nations Environment Programme (UNEP) is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system and serves as an authoritative advocate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

This post is in UNEP's Corporate Services Division (CSD), Enterprise Solutions Section (ESS) at the Nairobi duty station. ESS undertakes a wide range of digital related services, activities, and projects. It works closely with internal clients throughout the project life cycle to tailor the services to their needs ensuring that the solution meets the required objectives from a specification, resource, and time perspective.

One of the major activities that ESS is currently undertaking is the delivery of 6 digital readiness priorities contributing to the UNEP Digital Transformation Sub-Programme that was recently adopted by the UNEP Senior Management Team. UNEP's Digital Transformation is a cross-cutting enabling programme designed 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 behaviour 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.

In this regard, the Junior Professional Officer / Data Scientist will conduct data science and engineering activities to take active participation in enabling UNEP addresses the above key points. A few of the ongoing data science and engineering projects include: development of a funding intelligence platform to support UNEP in formulating a more effective and targeted resource mobilization strategy; development of a risk management tool for the Green Climate Fund; development of RAG systems using LLMs; deployment of an enterprise data platform infrastructure to facilitate rapid development of reports and dashboards and ensuring that business decisions are based on the same securely shared data.



## Why is the Junior Professional Officer requested/needed?

In responding to the delivery of 6 digital readiness priorities contributing of the UNEP Digital Transformation Sub-Programme assigned, ESS team is increasingly recognizing the importance of adopting advanced data analytics, including machine learning approaches. In ESS, this activity is handled by the Data Analytics / Engineering team lead by an officer at P4 level.

The Junior Professional Officer / Data Scientist will strengthen the ESS Data Analytics / Engineering team in handling the increasing requests from various UNEP offices / entities for advanced data analytics and machine learning -based solutions.

## Supervision

Under the overall supervision of Mr. Saiful Ridwan, (P5) Chief, Enterprise Solutions Section, Corporate Services Division of UNEP, the Junior Professional Officer / Data Scientist shall report directly to Mr. Damiano Scanferla, (P4) Data Specialist, Enterprise Solutions Section.

## **Content and methodology of the supervision**

The incumbent will be guided in his/her work and supervised by the first appraising officer. The incumbent and supervisor will jointly define an annual work plan, including objectives, timelines, and success criteria. Regular feedback on the progress of activities is obtained by the supervisor through review of work in process.

The Junior Professional Officer's performance appraisal will take place twice a year: a mid-term review and a final review. This also entails the assessments of accomplishments, review of problems, discussions on job-satisfaction; discussion of development plan and learning objectives (see training and learning elements), guidance to be provided in development of the work plan and project implementation.

The incumbent is expected to carry out the duties independently under general supervision and to consult with the supervisor on issues of policy or other sensitive matters. Results of each set of activities are reviewed for attainment of objectives and quality of work.

First appraising officer: Mr. Damiano Scanferla

Titles first appraising officer: Data Specialist

Unit: Enterprise Solutions Section

Location first reporting officer: Nairobi

Second appraising officer: Mr. Saiful Ridwan

Title second appraising officer: Chief, Enterprise Solutions Section

Unit: Enterprise Solutions Section

Location second appraising officer: Nairobi

## **Duties, responsibilities, and output expectations**

1. Translates organizational needs into analytics and reporting requirements to support decisions, strategies and workflows with data and information.
2. Contributes to the design and develops data science products to reveal insights and provides an understanding or knowledge of the data that would otherwise not be detected without the application of advanced analytical methods such as artificial intelligence, machine learning, predictive analytics, data and text mining, natural language processing, statistics, and use of relevant algorithms and computational approaches.
3. Contributes to the implementation of the cloud-based UNEP data analytics platform for corporate and environmental data and engage with data producers and consumers to effectively migrate their data pipelines.
4. Assists in the exploration, identification, and acquisition of data sources to determine their suitability for use in decision making and advancing the goals of the

organization. Enables broader use of data sources by applying quality methods to structure, clean, format, parse, and standardize for analytical use.

5. Establishes a close working relationship with key clients to leverage the use of data science methods to support their programmatic areas with solutions that assist them in accomplishing their mandates related to inclusive green economy, sustainable consumption and production, sustainable infrastructure, and circular economy.
6. Participates in promoting the use of data science solutions through client training and the development of products, tools, and processes to extend the capabilities of client offices.

### **Output expectations**

1. Development and delivery of data science solutions to better enable the planning, decision making, and implementation of organization programmes. Through close relationships with clients, designs products that provide situational awareness, insight, and predictive assessment to guide programme management and execution.
2. Contribution to the realization of a centralized data repository for corporate and environmental data.
3. Contribution to the identifying significant issues and opportunities to implement innovative approaches and evidence-based reasoning to complex organizational issues.

### **Travel**

Missions envisaged during first year of assignment 1 or 2 missions.

Missions envisaged during second year of assignment 2 missions.

### **Training and Learning Elements**

The Junior Professional Officer / Data Scientist will have full access to the comprehensive training courses offered at the UN Office of Nairobi, including courses related to foreign languages, project management, facilitation and moderation skills, presentation skills, supervising skills, time management, negotiations, and editing/writing/reporting. In addition, the Junior Professional Officer / Data Scientist will participate in UNEP-specific training courses and receive significant on the job training in presentation and teamwork skills. Junior Professional Officers usually have an allowance for trainings, which they will be able to use to participate in courses and conferences of their interest.

In addition, and whenever possible, the Junior Professional Officer / Data Scientist will be given the opportunity to participate in national, regional, and international events on the subject matter to get exposed to broader framework issues related to UNEP's value

chain approach and work on circular economy, sustainable business practices, sustainable consumption and production, green economy, and sustainable infrastructure.

On completion of the two-year assignment, the Junior Professional Officer / Data Scientist will be able to:

- create data products independently;
- work on data-related research on climate, nature, and pollution topics;
- collaboratively work on large projects in a team;
- introduce new technologies and methods to an organization;
- understand and confidently work with cloud solutions for automation and data pipelines;
- and design, implement, and operate a cloud-based data platform for a large organization in the context of digital transformation to address climate action, nature protection, and pollution prevention through the innovative use of data and digital technologies that the Junior Professional Officer / Data Scientist can apply in the country of the JPO, and also apply regionally or globally.

## **Qualifications and experience**

### **Education**

Advanced university degree in Data Science, Mathematics, Statistics, Engineering, Environmental Science, or any related field that includes intensified data analysis in the curriculum. A first-level degree in combination with two additional years of relevant work experience in data analytics or data science may be accepted in lieu of the advanced university degree.

### **Working experience**

- A minimum of two years of relevant work experience in data science, data analytics, applied mathematics, information management or related area is required.
- Experience in using data to advance decisions, strategies and execution is required.
- Experience with database and programming languages (SQL, Python, R) is required.
- Experience with self-service analytics and data visualization applications (MS PowerBI, Qlik, Tableau or similar), or business intelligence tools (SAP Business Objects, etc.) is desirable.
- Experience in tools managing version control such as Git is highly desirable.
- Experience in implementing digital solutions for environmental protection is a great asset.

### **Languages**

For this position, fluency in spoken English and excellent English writing skills are essential. Knowledge of another UN language is an advantage.

## **Competencies**

**Professionalism:** Knowledge of the data analysis life cycle from ingest and wrangling to analysis and visualization to present findings. Knowledge of statistical and computational methods, such as clustering, classification, correlation, dimension reduction, forecasting, machine learning, detecting outliers, and regression. Takes pride in the work for the organization and understands the impact that can be brought into the organization by allowing data-driven and evidence-based decisions. Shows pride in work and in achievements; Demonstrates professional competence and mastery of subject matter; Is conscientious and efficient in meeting commitments, observing deadlines and achieving results; Is motivated by professional rather than personal concerns; Shows persistence when faced with difficult problems or challenges; Remains calm in stressful situations; Takes responsibility for incorporating gender perspectives and ensuring the equal participation of women and men in all areas of work.

**Teamwork:** Works collaboratively with colleagues to achieve organizational goals; Solicits input by genuinely valuing others' ideas and expertise; is willing to learn from others; Places team agenda before personal agenda; Supports and acts in accordance with final group decision, even when such decisions may not entirely reflect own position; Shares credit for team accomplishments and accepts joint responsibility for team shortcomings.

**Planning and Organizing:** Develops clear goals that are consistent with agreed strategies; Identifies priority activities and assignments; adjusts priorities as required; allocates appropriate amount of time and resources for completing work; foresees risks and allows for contingencies when planning; monitors and adjusts plans and actions as necessary; uses time efficiently.

**Creativity:** Actively seeks to improve programmes or services; Offers new and different options to solve problems or meet client needs; Promotes and persuades others to consider new ideas; Takes calculated risks on new and unusual ideas; thinks "outside the box"; Takes an interest in new ideas and new ways of doing things; Is not bound by current thinking or traditional approaches

## **Living conditions at duty station**

The Junior Professional Officer / Data Scientist position will be based at the UNEP Headquarters in Nairobi, Kenya. The city Nairobi is classed as family duty station with normal living conditions for developing country in Africa.