July 2024

Title:	Junior Professional Officer – **Junior Software Programmer/Developer**
Unit:	**BR/IAP/SAS**
Supervision:	Senior Software Engineer, Space Applications Software Division
Location:	ITU Headquarter – Geneva, Switzerland
Grade:	**P2**

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.

The JPO would be based in ITU HQ in Geneva, Switzerland, an international and exciting city that host more than 190 international organizations. Geneva host more than two thirds of all UN activities and is visited by nearly 3000 heads of states or similar officials every year. It is a great opportunity to be based at the heart of the diplomatic world, and meet people from across the globe.

Organizational Unit:

<u>Organ</u>:
The Radiocommunication Bureau (BR) is responsible for the application of the Radio Regulations and for technical and administrative support of ITU World and Regional Radiocommunication Conferences, Radiocommunication Assemblies and Study Groups. The Bureau also carries out the international regulatory processes for registration of frequency assignments and satellite orbits and assists administrations in their coordination and implementation of frequency spectrum and orbit requirements as well as in resolving cases of harmful interference. It provides the specialized technical secretariat for the work of the Radiocommunication Study Groups and the Radiocommunication Assembly in the development of recommendations for spectrum utilization and radio system characteristics. The BR is organised into four Departments: Space Services Department, Terrestrial Services Department, Informatics, Administration and Publications Department and the Study Groups Department.

<u>Department</u>:
The Informatics, Administration and Publications Department (IAP) comprises of three Divisions: Space Applications Software (SAS), Terrestrial Applications Software (TAS) and Administration (ADM). The Department is responsible for the development and maintenance of software and related tools used by the BR as well as software adapted for national frequency management units, providing the necessary user support for the areas concerned. It carries out studies related to policies for the technologies to be used for the information and computational systems within the BR and with administrations in the fields of management of the radio frequency spectrum and the various satellite orbits. The Department is responsible for BR text editing and publications, as well as promotion and membership. The Department is also responsible for human resources management for the BR, including the preparation of the operational plans, as well as provides organisational support for conferences and meetings.

Duties, responsibilities and output expectations:

The Junior Professional Officer will work in the Informatics, Administration and Publications Department (IAP) of the Radiocommunication Bureau, under the supervision of a Senior Software Engineer in the Space Applications Software Division (SAS).

In collaboration with other SAS team members, the main duties and responsibilities will be to:

1. Participate in all the steps of the software development and maintenance cycle for web applications and/or desktop software applications to support BR space applications and databases.

2. Analyze user requirements and provide proposals.

3. Design, implement, test and deploy software solutions; troubleshoot and prepare documentation for software applications.

4. Contribute to the migration of legacy applications to modern technologies.

5. May be asked to perform additional duties.

Qualifications and experience required

Education:

University degree in computer science or engineering or a related field (science/materials science engineering, electrical/electronic engineering), OR education from a reputed college of advanced education with a diploma of equivalent standard to that of a university degree in one of the fields above.

Work experience:

At least three years of progressively responsible experience in software development. An advanced degree in a related field can be considered as a substitute for one year of working experience. A doctorate in related fields can be considered as a substitute for two years of working experience. Experience with working in a client/server database environment, SQL, etc. Experience with technical engineering programming languages (such as FORTRAN) and/or migrating legacy applications to modern technologies would be an advantage.

Languages**:**

Knowledge of one of the six official languages of the Union (Arabic, Chinese, English, French, Russian, Spanish) at advanced level and knowledge of a second official language at intermediate level. Knowledge of a third official language would be an advantage. (Under the provisions of Resolution No. 626 of the Council, a relaxation of the language requirements may be authorized in the case of candidates from developing countries: when candidates from such countries possess a thorough knowledge of one of the official languages of the Union, their applications may be taken into consideration.)

Competencies:

- Core Competencies: Organizational Commitment; Results-Focused; Applying Expertise; Effective Communication; Teamwork and Collaboration; and Learning and Knowledge Sharing.
- Functional Competencies: Analysis, Judgment & Decision Making; Innovation and Facilitating Change.
- Technical Competencies:
    - Ability and willingness to learn and stay up-to-date with new technologies.
    - Good knowledge of object-oriented software development using C# or C++ and related class libraries, and/or
    - Knowledge of web application development and deployment in various environments (React, ASP.NET MVC; …).

Training and Learning Elements

The JPO will become familiar with the international radiocommunication context and the specific role of the ITU in coordinating the use of the radio frequency spectrum. Specifically, the JPO will gain knowledge of the ITU processes and procedures in implementing the Radio Regulations and

other decisions of World Radiocommunication Conferences, ITU Plenipotentiary Conferences, and Radio Regulations Board proceedings.