

February 2025

Title: Software Applications Programmer Intern

Bureau/Dept/Unit: BR/SSD/USS

Supervision: Danny Tham/Head of USS

Duration: 6 to 11 months maximum

Location: ITU Headquarter/Geneva

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**:

Radiocommunication Bureau / SSD

|  |
| --- |
| 1. **Organizational context:**   Within the Radiocommunication Bureau, the Space Services Department (SSD) is responsible for the coordination and recording procedures for space systems and earth stations, In these activities, the Department deals with the capture, processing and publication of data and carries out examinations of frequency assignment notices submitted by administrations with a view to their inclusion in the formal coordination procedures or their recording in the Master International Frequency Register (MIFR). The Department is also responsible for the management of the procedures of the space related assignment or allotment Plans of the ITU and for the provision of assistance to administrations in their frequency management activities. The Department comprises four Divisions: Coordinated Space Systems, Uncoordinated Space Systems, Space Planned Services and Space Strategic and Sustainability Issues |

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

Under the supervision of Head, Uncoordinated Space Systems, supporting the Uncoordinated Space Systems team, the intern will contribute and support in the following areas of the work of the division:

* Develop internal software tools and applications using Visual Studio C#.
* Create applications that connect to MS Access and SQLite for generating output documents and results.
* Assist in developing supporting documentation, and communications of the new or revised software applications
* Assist in analysing workflows and improving efficiency through integration of software solutions
* Assist in developing training materials, including written guides, code examples,to cover fundamental concepts, practical applications on Visual Studio C#
* Contribute to web programming tasks, if knowledge of SVELTE is applicable.
* Support other tasks deemed relevant, when required, within the division.

1. **Competencies**

* **Technical Competencies**
* Working understanding of Visual Studio C#, etc. and experience with software development practices through coursework, personal projects, or internships.
* Familiarity with database management systems, particularly MS Access, SQ Lite, etc and knowledge of database programming.
* Web programming knowledge, particularly with SVELTE, is a plus.
* Ability to deliver programming training.
* Ability to work collaboratively in a team environment, a willingness to learn and proactive to contribute

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

Bachelor’s degree in Computer Science, Software Engineering, or a related field; candidates with degrees in other disciplines will be considered if they demonstrate strong programming knowledge and skills.

1. **Work experience**:

No work experience is required.

1. **Languages:**  
   English at advanced level.

Working knowledge of another UN language, with excellent knowledge of written and spoken French would be an asset.

1. **Training and Learning Elements:**

The intern will acquire excellent knowledge and experience of:

* **Understanding and Applying Radio Regulations**: Learn about the critical framework of international radio regulations, exploring how they govern the use of the radio spectrum and ensure fair access and collaboration among nations.
* **Navigating Satellite Filing Processes**: Delve into the complexities of satellite filing processes and learning of the software applications and tools that supports the work.
* **Developing Software Applications**: Gain practical experience in software development. Chance to work on real projects, enhancing coding skills and learning to create robust applications tailored to meet the needs of the work of an organisation.
* **Delivering Effective Training on Visual Studio C#**: Chance to design and deliver training sessions on Visual Studio C#, thereby strengthening presentation skills and deepening understanding of software development tools and practices.
* **Gaining Hands-on Experience with Industry Professionals**: Gain hands-on experience working alongside experienced professionals in the field of telecommunications within an international organization, participating in decision-making and problem -solving processes.