

INTERNATIONAL TELECOMMUNICATION UNION



ITU is the leading United Nations agency for information and communication technologies, with the mission to connect the world. To achieve this, ITU manages the radio-frequency spectrum and satellite orbits at the international level, works to improve communication infrastructure in the developing world, and establishes global standards that foster seamless interconnection of a vast range of communication systems. ITU also organizes global Telecom events bringing together the most influential representatives of government and the private sector to exchange ideas and knowledge for the benefit of all.

VACANCY NOTICE N° 2P-2020/BDT-DKH/EXTERNAL/P4

Date of Issue: 16 January 2020
Currently accepting applications

Applications from women are encouraged

Functions: Data Scientist

Post Number: TD42/P4/359

Deadline for Applications (23.59 Geneva CH) :
16 March 2020

Duration of Contract: 2 years with possibility
of renewal for 2 additional years

Type of Appointment: Fixed-term
Appointment

Duty Station: Geneva, Switzerland

Grade: P4

Organ:

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

Organization Unit:

The Digital Knowledge Hub Department is responsible for providing best practices and information to support the public policy decisions of ITU Member States. This department provides a platform for the members, as well as for external entities such as researchers, the private sector and other development agencies, to obtain critical information on digital trends, information society developments and digital skills. In addition to consolidating ITU's position as the recognized global source for regulatory information and ICT data, this department is responsible

for the work of ITU-D Study Groups. Finally, this department provides capacity and digital skills building programmes.

Duties / Responsibilities

Under the supervision of the Head, ICT Data and Analytics Division of the Digital Knowledge Hub Department, BDT, the incumbent carries out the following tasks:

- Develops the ITU work programme on big data. Explores how big data from ICT companies, telecommunication operators, industry associations and other sources can be used for improving and complementing existing data and methodologies to measure the digital society and economy, building on existing work of the ITU on measuring the information society using big data and other new technologies such as artificial intelligence, machine learning, block chain and IoT.
- Develops and refines the list of big data indicators defined by the ITU, as well as the methodology for compiling indicators using big data sources. Documents the processes employed in the indicators production chain.
- Develops algorithms for processing big data to be included in the ITU Manual on Big Data. Tests and runs the algorithms.
- Analyses and assesses the results of the statistical indicators from big data sources, compares the results with socio-economic indicators and ICT indicators currently available at the ITU coming from traditional sources (ground truth checking), and assesses the quality of the indicators.
- Participates in the Division's technical cooperation activities by organizing and delivering training workshops and advisory missions, and preparing methodological documents and tools related to big data; processes internal and external requests for statistics and answers queries related to methodologies and concepts applied to the data.
- Assists countries in implementing big data methodology according to the ITU Manual. Participates in drafting country reports.
- Develops partnerships and collaborates with relevant stakeholders within ITU as well as with international and regional organizations and other relevant entities in the area of big data. Represents ITU at international and regional meetings and seminars and prepares and makes presentations related to big data.
- Contributes to the preparation and organization of ICT-related meetings and seminars, including the World Telecommunication/ICT Indicators Symposium (WTIS) and its statistical expert groups; identifies relevant topics and speakers; coordinates meeting documents and presentations.
- Performs other related duties as assigned.

Competencies

- **Core Competencies:** Applying Expertise; Effective Communication; Learning and Knowledge Sharing; Organizational Commitment; Results-Focused, and; Teamwork and Collaboration.
- **Essential Functional Competencies:** Planning and Organizing; Analysis, Judgement and Decision-Making, and; Networking and Building Partnerships.
- **Essential Technical Competencies:** Excellent understanding of statistics, data mining, statistical methods, tests, distributions, sample design, etc. Excellent knowledge of Java, Python, Hadoop PIG. Excellent knowledge of processing large scale unstructured data using Hadoop or similar platforms. Good knowledge of GIS tools, such as QGIS or PostGIS, and of geographical attributes. Proficient user of one or more statistical analysis tools (SAS, R, SPSS, etc.) and of SQL.

Knowledge of any other programming language used for processing big data would be an advantage. Some knowledge about data visualization methods and tools, such as Tableau, QlikView or other.

Qualifications required

Education:

Advanced university degree in data science, computer science, computer engineering, information systems OR education from a reputed college of advanced education with a diploma of equivalent standard to that of an advanced university degree in one of the fields above. For internal candidates, a first university degree in one of the fields above in combination with ten years of qualifying experience may be accepted in lieu of an advanced university degree for promotion or rotation purposes.

Experience:

At least seven years of progressively responsible experience in working with big data, data mining, parallel processing, statistical analysis with specific results in academic research, private or public sector, including at least three at the international level. A Doctorate in a related field can be considered as a substitute for three years of working experience. Experience working with geographically distributed data and big data related to ICT topics 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.)

Additional Information:

Salary:

Total annual salary consists of a net annual salary (net of taxes and before medical insurance and pension fund deductions) in US dollars and a post adjustment (PA) (cost of living allowance). The PA is variable and subject to change without notice in accordance with the rates as set within the UN Common System for salaries and allowances.

Annual salary from \$ 73,516+ post adjustment \$ 56,901

Other allowances and benefits subject to specific terms of appointment, please refer to <http://www.itu.int/en/careers/Pages/Conditions-of-Employment.aspx>

Applicants will be contacted directly if selected for written test. Interviews may be used as a form of screening.

For further information concerning the Conditions of Employment please click [the following link](#)

Applicants will be contacted only if they are under serious consideration

Currently accepting applications



ITU is a smoke-free environment