

Job Description for Professional Posts

Reference:NA2025/61

Position and Grade: Associate Data Scientist for Human Health, P2

Organizational Unit: Division of Human Health

Duty Station: Vienna, Austria

Type/Duration of Appointment: FT – JPO, 1 year

Organizational Setting

The Department of Nuclear Sciences and Applications implements the IAEA's Major Programme 2, "Nuclear Techniques for Development and Environmental Protection". This Major Programme comprises individual programmes on food and agriculture, human health, water resources, environment and radiation technologies. These programmes are supported by laboratories in Seibersdorf, Monaco and Vienna. The Major Programme's objective is to enhance the capacity of Member States to meet basic human needs and to assess and manage the marine and terrestrial environments through the use of nuclear and isotopic techniques in sustainable development programmes.

The Division of Human Health is organized into four Sections whose objectives are to enhance the capabilities of Member States to address needs related to the prevention, diagnosis, and treatment of health problems through the development and application of nuclear techniques within a framework of quality assurance.

Main Purpose

The Associate Data Scientist for Human Health reports to the Division Director and contributes specialized technical knowledge and experience to the development, maintenance and validation of the databases pertaining to NAHU. The incumbent supports the ongoing development and recommends improvement of database structures and links between datasets; monitors and reports on the quality and maintains the update of the relevant websites linked to the databases. He/she applies technical knowledge to maintain information systems, creates effective data collection methods, provides expertise and conducts statistical analysis of data, and develops analysis tools in order to enhance IAEA research, reporting and presentations that incorporate data.

Role

The Associate Data Scientist for Human Health is (i) a contributor who, with NAHU professional staff, develops, enhances and maintains databases based on the activities of the Sections, and ensures the confidentiality of classified information; (ii) a collaborator, who interacts with institutions in Member States and organizations in order to collect and validate data elements; (iii) a technical officer in databases with the ability to maintain high quality datasets using modern IT technologies and solutions, as well as produce relevant end-user documentation including internal and external user manuals, SOPs, etc. in collaboration with relevant colleagues in the IAEA; and (iv) a team member soliciting inputs from other specialists and assisting in defining, planning and executing projects.

Partnerships

The Associate Data Scientist for Human Health consults with staff members within the Division to agree on scope of work to be undertaken, resource requirements and schedule. The Associate Data Scientist also interacts with data engineers, scientists, and other data-focused specialists across the organization.

Functions / Key Results Expected

- Maintain and quality-assure the existing NAHU databases.
- Conduct analysis and interpretation of data from databases for scientific and reporting purposes including identification of possible trends, patterns, and statistical correlations relevant to the specific databases.
- Prepare charts and figures for comprehensive data visualization.
- Initiate and collaborate with all NAHU sections and other relevant Agency teams on the design and construction of new databases.
- Prepare clear and concise reports and presentations detailing findings, applied methodologies, and implications for the community of human health and nutrition professionals.
- Design different types of surveys, monitor data submission and support data analysis.
- Ensure compliance with regulatory guidelines and ethical standards governing the compilation and use of data from NAHU-hosted databases, maintaining data integrity and personal data privacy throughout the analysis and reporting processes.

Competencies and Expertise (do not revise or edit)

Core Competencies		
Competence	Occupational Role	Behavioural Indicator
Communication	Individual Contributor	Communicates orally and in writing in a clear, concise and impartial manner. Takes time to listen and understand the perspective of others and proposes solutions.
Achieving Results	Individual Contributor	Takes initiative in defining realistic outputs and clarifying roles, responsibilities and expected results in the context of the Department/Division's programme. Evaluates his/her results realistically, drawing conclusions from lessons learned.
Teamwork	Individual Contributor	Actively contributes to achieving team results. Supports team decisions.
Planning and Organizing	Individual Contributor	Plans and organizes his/her own work in support of achieving the team or Section's priorities. Takes into account potential changes and proposes contingency plans.

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Functional Competencies		
Competence	Occupational Role	Behavioural Indicator
Commitment to continuous process improvement	Associate	Identifies opportunities for process, system and structural improvement as well as improving current practices, increasing effectiveness and achieving efficiency gains. Actively supports the application of sound quality management standards and process improvement.
Client Orientation	Associate	Establishes effective relationships with clients to understand and meet or exceed their needs. Finds ways to ensure client satisfaction.
Partnership Building	Associate	Develops and maintains partnerships needed for his/her work. Establishes and nurtures positive relations with partners and stakeholders.
Technical/Scientific Credibility	Associate	Acquires and applies new skills to remain up to date in his/her area of expertise. Reliably applies knowledge of basic technical/ scientific methods and concepts.
Knowledge Sharing	Associate	Actively seeks opportunities to learn by formal and informal means; learns from others, adopting and sharing best practice
Analytical Thinking	Associate	Gathers and analyses information, identifying critical relationships and patterns among data and proposes workable solutions.
Judgement/Decision Making	Associate	Consults with supervisor/manager and makes decisions in full compliance with the Agency's regulations and rules.

Expertise	
Expertise	Description
Radiation Medicine Database Operations	Experience in database design, data collection and data curation.
Information Technology Database Management	Familiar with SQL server; design and analysis of databases.
Information Technology Data Analysis	Descriptive statistics, predictive analytics, data visualization, statistical tools (R, Stata, SAS, SPSS).

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Information Technology Business Intelligence Analysis	Reporting, Online Analytical Processing (OLAP), data mining.
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Education, Experience and Language Skills

- University degree in Data Science, Mathematics, Statistics, Engineering or a related field.
- Master's degree in Data Science, Mathematics, Statistics, Engineering, or a related field from an accredited academic institution is an asset.
- Minimum of two years of working experience in database administration and information/data modelling and systems administration.
- Experience in the use of software related to databases e.g. MS Excel, SQL server.
- Expertise in data visualization/presentation and statistical methods and interpretation.
- Experience in designing a database based on a set of requirements.
- Excellent oral and written command of English. Knowledge of other official IAEA languages (Arabic, Chinese, French, Russian and Spanish) is an asset.