**Internship Title**

Internship – International Nuclear Information System – Data Science and Machine Learning

**Duration of Internship**

12 months

**Target Start of Internship:**

2024

**Organizational Setting**

Department: Department of Nuclear Energy

Division: Division of Planning, Information and Knowledge Management

Section: Nuclear Information Section

**Main Purpose**

The main purpose of the internship is to gain knowledge and training on the IAEA International Nuclear Information System (INIS), particularly in the areas of data science, machine learning, and taxonomies.

**Tasks / Key Results Expected**

* Machine Learning: Learn techniques of using appropriate machine learning algorithms for natural language processing of INIS records.
* Machine Learning: Learn and apply techniques in the creation of automated workflows.
* Data Science: Learn and apply techniques of data analysis with large datasets.
* Data Representation: Learn and apply techniques of data representation in graphic form.

**Knowledge, Skills and Abilities**

* Software Development
* Machine Learning
* Artificial Intelligence
* Taxonomy Creation and Management
* Data Science and Representation

**Qualifications and Experience**

* University degree in Information Management, Information Technology, Data Science and related fields.
* Experience in working with taxonomies for organization and indexing of scientific information would be an asset.
* Experience in the creation and design of machine learning and artificial intelligence algorithms would be an asset.
* Experience in programming with Python, TensorFlow, PyTorch or other artificial intelligence related systems would be an asset.
* Data Representation with PowerBI, Tableau or related would be an asset.

**Internships**

The IAEA accepts a limited number of interns each year. The internships are awarded to persons studying towards a university degree or who have recently received a degree (see Internship web pages for further details).

The purpose of the programme is:

* To provide interns with the opportunity to gain practical work experience in line with their studies or interests, and expose them to the work of the IAEA and the United National as a whole.
* To benefit the IAEA's programmes through the assistance of qualified students specialized in various professional fields.
* The duration of an internship is normally not less than three months and not more than one year.

**Applicant Eligibility**

* Candidates must be a minimum of 20 years of age and have completed at least three years of full-time studies at a university or equivalent institution towards the completion of a first degree.
* Candidates may apply up to one year after the completion of a bachelor's, master's or doctorate degree.
* Candidates must not have previously participated in the IAEA's internship programme.
* Good written and spoken English essential; fluency in any other IAEA official language (Arabic, Chinese, French, Spanish or Russian) an asset.
* Candidates must attach two signed letters of recommendation to their application.