Role description

Job title	Data Science Specialist
Job family	Core
Job sub-family	Business & Data Intelligence
Entry grade	AD06
Role summary	Contribute to the transformation of the Agency, into a modern, data-driven organisation by running and developing the services responsible to provide efficient services in the delivery of evidence to support benefit-risk decision-making on the development, authorisation and use of medicines.
Standard role duties & responsibilities	Perform duties reserved only for the Temporary Agent contractual category.
	Understand, analyse and present data requirements in a visual, clear and structured manner, and translate business needs into scenarios, analytical approaches and solutions to impact on business processes and decision-making;
	Develop and coordinate the implementation of activities through delivery of new processes and digital solutions, in collaboration with EMA's users and stakeholders;
	Manage and coordinate activities associated to data management and data analysis activities as required;
	Design AI and ML solutions undertake proof-of-concepts and implement these solutions;
	Manage ongoing improvements to methods and algorithms that lead to findings, including new information;
	Coordinate, develop and implement processes and methods ensuring that the information used follows the compliance, access management and control policies of the Agency and meets the qualification and assurance requirements of the business;
	Create, implement and drive data analyses, dashboards, solutions for data available at the Agency and processes related to data modelling, data processing, data architecture, data integration, data quality, data analysis and data visualisation activities;

	Coordinate business data management and analytics input (e.g. performing UATs, verify data consistencies and verify metrics output) in projects aiming to deliver new data-driven IT solutions or in the maintenance processes of data-driven IT solutions;
	Inform data collection, integration and retention requirements based on the input collected with the business;
	Leverage tools and resources to plan, evaluate and execute strategic initiatives;
	Experiment through implementation of new technologies.
Role specific duties & responsibilities	The specific tasks of an individual job holder, linked to this role description, are further detailed and referenced in:
	activities of the organisational entity within which the job holder carries out those tasks;
	the set of annual performance and development objectives, which are established together with the reporting officer;
	the requirement to comply with SOPs, WINs, Confidentiality Undertaking and other documentation relevant to the role and its scope. These will be agreed upon with the reporting officer upon assuming duties.
Managing resources	Plans most daily work details within given priorities. May have a direct supervision of one or more people performing related work. Work may include a degree of planning and coordination, including small projects.
Communication and professional contacts	Required to regularly communicate (verbally and in writing) information, which requires careful explanation and interpretation, taking into account what to communicate and how best to convey the information. Writing and creating information that is specialist, sensitive, confidential, legal and/or regulatory in nature.
	Regular professional contacts with others inside and/or outside the Agency on functional matters. Solicits/gives information, provides advice/guidance and should use initiative. A likely requirement is to influence others' thinking and negotiate with various parties within own job responsibilities. Normally connected to the Agency's core business or a project.
	In particular, a Data Science Specialist will:
	Liaise with external stakeholders on data submission, analytics and extraction;
	Participate in a cross-functional team and provide in-depth data insights for complex business problems that can be approached with advanced analytics;
	Act as the link between the business and IT in the inception and implementation of the various databases.

Essential requirements Education Experience Skills & knowledge Certificates	**Education** A level of education which corresponds to completed university studies of at least three years attested by a diploma; *Field of study* Data Science, Informatics, Computer Science, Engineering, Statistics, Mathematics, Physics, Chemistry, Biochemistry, Economics, Biology, Medicines, or Pharmacy or other fields of science that require advanced use of analytics skills. **Experience** 3 years from the time when a university degree was awarded on completion of a minimum of three years of study; Proven experience in at least one of the following: In managing, delivering and implementing and using data analytics solutions which include Artificial Intelligence components; Advanced statistical analytics techniques and/or in building AI and ML models and solutions (e.g. as decision tree, logistic regression, hierarchical regression, neural network, random forest, etc.) Implementing AI and ML for data-driven decision-making and/or process automation designing and performing complex data analyses to support data-driven decision-making and/or scientific assessments; Delivering, implementing and using data analytics solutions; Understanding, cleansing, integrating and analysing massive and live data sets; data modelling and data quality frameworks; Using statistical software (for instance R, SAS, etc.) and programming languages used in analytics (for instance SQL, PL-SQL, Python, R, etc.); Using data visualisation tools (for instance Tableau, R Shiny, Oracle BI, Power BI). Experience in working in a team and in a multicultural and multi-disciplinary environment. Experience with Data visualisation **Skills & Knowledge** n/a **Certificates** n/a

Nice to have Education Experience Skills & knowledge Certificates	**Education** Completed PhD or master's degree in one of the university degrees required for eligibility. **Experience** In working in a regulatory environment related to the evaluation of medicines or interacting with regulatory agencies; With tools used in big data frameworks (e.g. Hadoop, MapReduce, etc.); In the implementation of NoSQL databases and related solutions; In data analytics frameworks based on cloud technologies. **Skills & Knowledge** n/a **Certificates** n/a

Category	Competency	Proficiency level
Role competencies	Data modelling and design	Intermediate
	Developing and applying innovative practices	Intermediate
Sub-family competencies	Biostatistics	Intermediate
	Data management	Advanced
	Data analytics	Intermediate
	Applied knowledge management	Intermediate
Grade competencies	Adaptability and agility	Intermediate
	Analysing and problem solving	Intermediate
	Prioritising and organising	Intermediate
Core competencies	Ethics and integrity	Intermediate
	Team collaboration	Intermediate
	Customer centricity	Intermediate
	Results orientation	Intermediate
	Communication	Intermediate

	Cross-cultural sensitivity	Intermediate
	Continuous learning and self-development	Intermediate