

Job title	CC 076 Data Scientist		
Job family	Data & Analytics	Band	D

Job purpose

Individuals within the Data Scientist role are responsible for modelling complex problems, discovering insights and identifying opportunities through the use of statistical, algorithmic, mining and visualisation techniques. In addition to advanced interpretive skills, this role is also proficient at integrating and preparing large, varied datasets, building specialised database and computing environments, and communicating results.

These professionals will need a combination of business focus, analytical, problem-solving skills and programming knowledge to be able to quickly cycle hypothesis through the discovery phase of the project. Good written and communications skills to report back the findings in a clear, structured manner are required.

As a Data Scientist you will work as part of a multi-disciplinary team to ensure that the BBC’s data management, analytics and data science services are implemented and matured in the area that you support to transform business capabilities and enable the next generation of Broadcast and Digital services.

You will be a specialist in your field with specialist knowledge in at least one technology, software, infrastructure, application, digital or broadcast and production domain. You will provide knowledge and guidance to multiple stakeholders. You will have an appreciation of how the complete range of data science specialisms impact your area and you will use this knowledge to ensure you deliver data-informed change, improve decision making and creative reuse of assets across the area that you support.

Key responsibilities and accountabilities

- Designs experiments, test hypotheses, and build models
- Translates business challenges into machine learning problems
- Develops machine learning algorithms to problems that don’t always have existing text book solutions
- Collaborates with subject matter experts to select the relevant sources of data from across BBC divisions
- Works with team leaders and members to solve data science problems and documents results and methodologies
- Works in iterative processes and validates findings, performs experimental design approaches to validate finding or test hypotheses.
- Validates analysis by comparing appropriate samples, employs the appropriate algorithm to discover patterns
- Uses the expected qualification and assurance of the data to quantify the accuracy metrics of the analysis
- Qualifies where information can be stored or what data, external to the organisation, may be used in support of the use case
- Assesses the volume of data supporting the initiative, the type of data (e.g., images, audio, video, text, clickstream etc.) and the speed or sudden variations in data collection
- Collaborates with the data engineer to ensure that the data used follows the compliance, access management, and control policies and that it meets the qualification and assurance requirements

- Recommends ongoing improvements to methods and algorithms that lead to findings, including new information
- Spreads the value of data and data science across the wider organisation

Knowledge, skills, training and experience

Essential

- Holds an advanced degree in mathematics, statistics or computer science or related field, or equivalent experience.
- Experience manipulating large datasets and using databases, and experience with a general-purpose programming language (such as Hadoop MapReduce or other big data frameworks, Java, Python)
- Good experience in the use of statistical packages and machine learning algorithms
- Familiarity with basic principles of distributed computing and/or distributed databases
- Demonstrable ability to quickly understand new concepts-all the way down to the theorems-and to come out with original solutions to mathematical issues
- Good communication and interpersonal skills
- Knowledge of one or more business/functional areas

Desirable

- Broadcast, production, start-up or media experience
- A mix of public sector and commercial experience

Job impact

Decision making

- *Provides technical expertise in the development and implementation of data science capability and standards; promoting best practice within the area of business*
- *Develops novel data science approaches to vaguely defined business problems*
- *Assessing options for business as usual and emerging technologies*
- *Assessing the appropriate mix of build/buy options within the area of business taking into account strategic direction, business flexibility and emerging disruptive tech*

Scope

- *This is a junior role providing technical expertise across: project teams; technical delivery resources; an emerging matrix organisation*
- *Strategic dimensions: covering transformation mid and long-term (2-5 years)*
- *People Management: no direct reports.*
- *Learns and develops new and emerging approaches*

Other information

For Reward team use only

Job Code

Definition:

Content Support

JOB DESCRIPTION



This job description is a written statement of the essential characteristics of the job, with its principal accountabilities, incorporating a note of the skills, knowledge and experience required for a satisfactory level of performance. This is not intended to be a complete, detailed account of all aspects of the duties involved.