

<b>Job title</b>	Principal Data Engineer		
<b>Job family</b>	Data & Analytics	<b>Band</b>	D

**Job purpose**

The BBC aims to stimulate and delight audiences across the UK with distinctive, creative content. To support this aim, BBC is entering a new charter period of significant and exciting change, developing new capabilities in order to define a BBC fit for the next generation.

OUR MISSION: To inform, educate and entertain all audiences, to deliver our public purposes

OUR AIM: To reinvent the BBC for a new generation

We'll do this through... OUR AMBITIONS: Making sure everyone gets value from the BBC, world-class creativity, global reach, financial stability and making the BBC an even greater place to work.

Data Engineering team are made up of individuals with domain knowledge. They are responsible for designing the data model, building and maintaining the data pipelines and encouraging large scale and high resilience infrastructure.

These teams strive to deliver quality with an eye on value for money and exceptionally high ethical and technical standards.

Data Engineers are a key members of a multi-disciplinary agile team working alongside analysts, data scientists and software engineers to deliver services and applications for the next generation of BBC products.

Data Engineers will be critical to driving positive change for users and the business, and be able to embrace it in a spirit of partnership and positive attitude.

As a team member you will be expected to:

- Communicate and understand strategy decisions, updates and insights to all team members
- Evaluate and adapt processes and technologies to new requirements and situations including relevant team members in the process
- Manage complex projects with integrity when faced with challenges
- Supports team in working together effectively

**Key responsibilities and accountabilities**

- Prioritizes stakeholders requirements and identify the best solution for timely delivery
- Includes other team members in building innovative solutions to acquiring or enriching data used to build machine learning algorithms
- Leads on one or more projects encouraging and mentoring team members on designing and developing software applications, testing, and building automation tools
- Helps set standards for coding, testing and other engineering practices
- Ensures that security and recovery is in line with BBC guidelines and industry best practices
- Leads the design of the data infrastructure and architecture for a given project
- Sets the direction for the development, testing, implementation, and maintenance of database management applications
- Leads on the building and testing of business continuity & disaster recovery procedures per requirements

- Proactively evaluates and provides feedback on future technologies and new releases/upgrades based on deep understanding of the domain
- Encouraging and mentoring team members in partnership with other disciplines to create value with data across the wider organisation

**Knowledge, skills, training and experience**

**Essential**

- Typically an advanced degree in computer science, computer engineering, other technical discipline, or equivalent work experience.
- Strong software development or database experience.
- Working experience with various agile or other rapid application development methods and experience with object-oriented design, coding and testing patterns
- Strong experience with object-oriented coding with a variety of languages
- Strong experience with relational database internals, including both query processing and query planning, or other data processing infrastructure
- Expertise in key data structures and algorithms and a basic knowledge of machine learning
- Expertise in data modeling and understanding of different data structures and their benefits and limitations under particular use cases.
- Strong experience with monitoring, backup, and disaster recovery of data systems and knowledge in different programming or scripting languages.

**Desirable**

- Contributing to the development of area of specialism or industry domain
- Broadcast, production, start-up or media experience
- A mix of public sector and commercial experience
- Participation in published documents within your area of specialism
- Successful academic background in your specialist discipline

**Job impact**

**Scope**

- This is a mid level role
- People Management: no direct reports.
- Domain expertise: Owns the interpretation of the definition of the domain within the BBC. Demonstrates deep understanding of a specific domain.
- Influencing: Proposes technical approaches based on evidence and domain knowledge to the broader community in the BBC
- Leadership: Owning key deliverables and allocating tasks to relevant team members.

**Other information**

**For Reward team use only**

Job Code

Definition:

Content Support

*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.*