

Job title	Senior Data Engineer		
Job family	Data & Analytics	Band	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 supporting 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 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 collaboration and positive attitude.

As a team member you will be expected to:

- Communicate complex concepts to technical and non-technical audiences
- Contribute to the development of new processes and technologies when needed
- Manage complex projects
- Guide other members of the team

Key responsibilities and accountabilities

- Builds Big Data and batch / real-time analytical solutions leveraging transformational technologies
- Breaks down stakeholders requirements into smaller tasks and identify the best solution
- Builds innovative solutions to acquiring or enriching data used to build machine learning algorithms
- Works on one or more projects guiding other team members on designing and developing software applications, testing, and building automation tools
- Codes, tests, and documents new or modified data systems to create robust and scalable applications for data analytics and creates data flow diagrams for all of business systems.
- Grows data platform capabilities to solve new data problems and challenges.
- Implements security and recovery tools and techniques as required and builds automation tools
- Conducts insightful and physical database design, designs key and indexing schemes and designs partitioning

- Develops, tests, implements, and maintains database management applications, constructs and implements operational data stores and data marts
- Participates in building and testing business continuity & disaster recovery procedures per requirements
- Evaluates and provides feedback on future technologies and new releases/upgrades based on their market knowledge of the domain when asked to do so

Knowledge, skills, training and experience

Essential

- Typically an advanced degree in computer science, computer engineering, other technical discipline, or equivalent work experience.
- Software development or database experience.
- Experience with agile or other rapid application development methods and experience with object-oriented design, coding and testing patterns
- Experience with object-oriented coding with a variety of languages
- Experience with relational database internals, including both query processing and query planning, or other data processing infrastructure
- Working knowledge of key data structures and algorithms and a basic knowledge of machine learning
- Working knowledge of data modelling and understanding of different data structures and their benefits and limitations under particular use cases.
- 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: Strong domain knowledge and ability to explain domain to others in simple terms. Has internal and market knowledge of the domain.
- Influencing: Proposes technical approaches based on evidence and domain knowledge
- Management: Determining and owning of activities and tasks within a project and responsibility for the outcomes.

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.

Appendix

There may be sub-sets of the generic job described above which require additional technical skills. This appendix to the generic job description can be developed to cover such situations.

Division	
Reports to (title)	Principal or Lead Data Engineer
Location base	

Organisation structure	

Additional job specific responsibilities and accountabilities_

Approval	
Manager	Name and job title
HR Business Partner	Name
Date	