

Job title: Senior Data Engineer

Reports to: Lead Analyst

Team: Insight & Analytics

Key relationships: Insight & Analytics Team, Development Hub Team, Product Managers, Project Managers, Project Coordinators

Assurance statement:

The purpose of this job description is to outline the level of responsibility and accountability of this post. This will ensure that all work undertaken by our staff is clearly identified and carried out under clear lines of accountability.

Job Overview:

The Benchmarking Network are looking for an experienced Senior Data Engineer with strong technical expertise and innovative mindset to drive our team forward. The primary purpose of the role is to be responsible for designing, building, optimising and maintaining the infrastructure that allows data to flow from various sources to storage systems, supports data storage, processing, and analysis, enables high-quality, secure, and scalable data delivery across the organisation. Data Engineer will be involved in the entire data pipeline from data acquisition to data extraction, ensuring that the data is accurate, reliable, and accessible, and fit-for-purpose for business intelligence, analytics, and data science functions. Data Engineer will be collaborating with cross-functional teams to support the delivery of impactful analytics work for our clients.

Roles and Responsibilities:

1. Designing, building and maintaining data pipelines.
2. Building and maintaining data warehouses.
3. Data cleansing and transformation.
4. Developing and maintaining ETL processes (ELT = extract, transform, load) to extract, transform, and load data from various sources into data warehouses.
5. Validating charts and reports created by systems built in-house. Creating validation tools.
6. Developing and maintaining data models, data tools.
7. Monitoring and optimising the performance of data pipelines, data storage and processes, identifying and resolving bottlenecks to ensure efficient data processing and retrieval.
8. Ability to integrate data from multiple sources, including databases, APIs, websites, and flat files for efficient data processing.
9. Selecting and integrating appropriate tools and technologies.
10. Troubleshooting and resolving data-related issues.
11. Architect scalable data solutions to support advanced analytics, machine learning, and real-time processing needs.
12. Design and implement data governance frameworks, including metadata management, lineage tracking, and cataloging.
13. Ensuring data quality and reliability; ensuring data security and compliance, including GDPR.
14. Document data engineering standards, design decisions, and infrastructure setup for operational transparency.
15. Collaborating with other teams to ensure data availability.



16. Collaborate with data scientists and analysts to ensure data availability for experimentation, model training, and deployment.
17. Defining and delivering clear data engineering work packages and deliverables.
18. Supporting the implementation of new infrastructure to improve the quality and efficiency of projects delivery.
19. Identify opportunities for innovation, improved productivity, efficiency, and quality.
20. Evaluate and prototype new tools or technologies, recommending enhancements to the existing data stack.

Person Specification

| | Essential | Desirable |
|---|-----------|-----------|
| At least 3 years industry experience. | × | |
| At least 5 years industry experience. | | × |
| Experience in R programming language. | × | |
| Experience in Python programming language. | × | |
| Knowledge and proficiency in working with database systems (SQL/PostgreSQL) and writing performant SQL queries. | × | |
| Experience in designing, building and maintaining data pipelines. | × | |
| Experience with data warehousing and data lakes. | × | |
| Experience in developing and maintaining ETL processes. | × | |
| Experience in developing data integration tools. | × | |
| Experience in data manipulation, data analysis, data modelling. | × | |
| Experience with cloud platforms (AWS, Azure, etc.) | × | |
| Experience in designing scalable, secure, and cost-efficient data architectures aligned with business needs. | × | |
| Proficiency in optimising database queries, pipelines, and storage for speed, scalability, and cost-efficiency. | × | |
| Skilled in using Git. | × | |
| Strong track record of problem-solving ability and troubleshooting skills. | × | |
| Excellent IT skills including fluency with all Microsoft packages, particularly Excel, Word, PowerPoint, PowerBi. | × | |
| Evidence of excellent communication and interpersonal skills. Clearly communicate technical concepts to both technical and non-technical audiences. | × | |
| Experience and desire to work in a team. | × | |



| | | |
|---|---|---|
| Adaptability and willingness to learn new technologies. | × | |
| Willingness to work flexibly and adaptably. | × | |
| Experience of line management and mentoring of junior colleagues. | | × |

Personal Attributes

| | Essential | Desirable |
|--|-----------|-----------|
| Highly motivated and curious about our members, the work we do, how we can improve, how we can ensure maximum impact to benefit members and the delivery of healthcare services. | × | |
| Eager to participate in and contribute to a learning environment and to your own professional development. | × | |
| Detail oriented with excellent organisational skills. | × | |
| Highly professional in your internal and external communications. | × | |
| Committed to working with the highest level of integrity. | × | |
| Committed to the ongoing development of a strong and positive team culture. | × | |
| Genuinely interested and enthusiastic about developing and delivering quality improvement activities for our stakeholders. | × | |

Equality and Diversity

The Benchmarking Network aims to create and encourage an environment that is committed to promoting equality, diversity, working inclusively, and valuing the differences that individuals can bring to the workplace. We uphold these principles in our organisational values and behaviours towards each other and our patients. All staff should be afforded equality of treatment and opportunity in employment irrespective of age, disability, sex, gender identity and gender expression, race or ethnicity, religion or belief, sexuality, or other personal circumstances.

Hours of work and location

You are required to work 37.5 hours per week Monday – Friday with core hours of 10am – 4pm. We operate a hybrid working environment, which means you may be required to work from our Manchester office on occasions (as required for meetings and events). Your main base will be Manchester, but travel may be required to other locations.

We provide a flexible working environment to ensure that you can meet the needs of the business while enabling accommodation of personal and family commitments.

The Benchmarking Network may require you to work over and may also need to vary your hours of work, including your starting and finishing times, to meet the exigencies of the service. Should it be necessary to make any major or permanent change you will be given a reasonable period of notice after consultation.





Confidentiality

All employees are required to observe the strictest confidence with regards to any client information that they may have access to, or accidentally gain knowledge of, in the course of their duties.

All employees are required to observe the strictest confidence regarding any information relating to the work and its employees.

You are required not to disclose any confidential information either during or after your employment with The Benchmarking Network, other than in accordance with the relevant professional codes.

Failure to comply with these regulations whilst in the employment of The Benchmarking Network could result in action being taken under the disciplinary policy.

Data Protection

All employees must adhere to the Policy on the Protection and use of Personal Information, which provides guidance on the use and disclosure of information.

Health and Safety

The Benchmarking Network expects all staff to have a commitment to promoting and maintaining a safe and healthy environment and be responsible for their own and others welfare.

Risk Management

You will be responsible for adopting the Risk Management Culture and ensuring that you identify and assess all risks to your systems, processes and environment and report such risks for inclusion within the Risk Register. You will also attend mandatory and statutory training, report all incidents/accidents including near misses and report unsafe occurrences as laid down within the Integrated Governance Policy, contributing to Organisational Learning.

Date issued: June 2025

