Effective date- November 2024

Gateshead Council

Role Profile – Data Engineer

INFORMATION ABOUT THE ROLE:

Group	Resources and Digital
Service	IT Services
Location	Civic Centre
Line Manager	Data Engineering Team manager
Grade/SCP	Grade F to I (Career Grade), SCP 14 – 31

JOB PURPOSE:

- The postholder will design, develop, implement and maintain high quality data products in our data platform to support the Council's objectives and decision-making processes.
  To ensure data solutions meet functional requirements, are compliant, secure, robust, scalable and documented.

WHAT WE WANT YOU TO DO:

- To design, build, implement, optimize and document data pipelines and products. Design and implement scalable data solutions leveraging the capabilities of our data platform. Ensure that data flows perform accurate data collection, transformation (ETL/ELT), matching, enrichment, storage and sharing in line with the council's strategies, policies and priorities.
- To assist senior members of the team with the optimization of our data architecture and data processes, ensuring that they continue to operate efficiently and effectively, providing a secure, scalable and resilient platform to meet the Council's requirements.
- To develop and maintain interoperable data systems under the guidance of senior members of the team, ensuring effective integration between our products and systems. Ensure data is used to enhance the Council's Data Catalogue and Master Data Management model.
- To maintain best practice operational procedures, including automatic provisioning, testing and deployment using DevOps/DataOps practices ensuring a robust and efficient data platform operating environment.



Gateshead Council

- To automate and streamline data tasks. Leverage automation to enhance the efficiency of data operations, reducing manual workload.
- To participate in data projects across all Council service areas, providing expertise in data engineering and analytics to support projects and innovation, and ensuring a uniform approach to data collection, processing and presentation.
- To manage data permissions and sharing on the data platform which encourages and supports a culture of data sharing within the Council and with external partners whilst complying with data protection regulations.
- To foster innovation in the data engineering team and across other Council analytics teams, through mentoring, targeted training and a commitment to continuous professional growth and learning, ensuring the latest industry best practice and standards are adopted into our ways of working and solutions.
- To contribute to the Council's Community of Practice and Centre of Excellence, to drive continuous improvement and innovation. Assisting in developing the data capacity and capability of colleagues and our workforce.
- To help maintain a healthy, safe and secure environment and abide by all Council policy and procedures.
- Such other responsibilities allocated which are appropriate to the grade of the post.
- To undertake specialist Data Engineering training to enhance skill levels and gain certification so that you can contribute fully to the data team.

WHAT YOU NEED TO BE SUCCESSFUL…THE ESSENTIALS:

THE KNOWLEDGE

- A degree in an IT/Data engineering related discipline is desirable. However, an applicant that is passionate about data, has relevant experience in working within the data analytics field, and is willing to work towards a data engineering qualification and certification would be equally suitable.
- 5 GCSE passes or equivalent
- Technical knowledge of data engineering practices, including ETL/ELT techniques, data types and data management.
- An understanding of data modelling concepts and database design principles including data warehousing.
- An understanding of data programming/scripting languages such as Python, T-SQL, PySpark and KQL
- An understanding of data standards, privacy, governance and security.
- An understanding of data analytics tools especially Power BI
- An understanding of Local Government processes and data systems is desirable.



Gateshead Council

THE EXPERIENCE

- Experience of working with data in a Data Engineering/analytics role
- Demonstrable experience of working with data technologies such as MS SQL, Azure Synapse and preferably Microsoft Fabric / Power BI.
- Demonstrable experience of manipulating data ETL/ELT for the analytics purposes
- Experience of using a variety of data sources with both structured and unstructured data
- Demonstrable experience of deciphering, modelling, and matching data in a big data environment
- Experience of working with data security measures
- Demonstrable track record of using two or more of the following languages SQL, JavaScript, KQL, Node.js, Java, Python, R.
- Experience with metadata management
- Experience of Power Platform development is preferred
- Experience working in the public sector is preferred

THE SKILLS

- Ability to design, validate and implement resilient, secure and scalable data pipelines that integrate data from multiple sources, utilizing a variety of storage technologies and access methods in line with organizational standards
- Strong programming skills in data engineering programming languages such as SQL, Python and/or R.
- Excellent mathematical, problem-solving, and analytical skills to solve complex data challenges
- Excellent communication skills with the ability to simplify complex technical concepts for non-technical audiences at all levels.
- Ability to collaborate with non-technical colleagues to iteratively create an engineering solution that effectively meets the requirements of a service.
- Excellent team working skills with the ability to mentor colleagues
- Ability to commit to continuous professional development and learning.



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OUR COMPETENCIES... HOW WE WANT YOU TO BE*:*

CUSTOMER FOCUSED
Puts the customer first and provides excellent service to both internal and external customers

GREAT AT COMMUNICATION
Uses accessible and inclusive methods to express and deliver accessible information in a clear and concise way to ensure our diverse workforce and communities understand

TEAM PLAYER
Works with others to achieve results and develop good working relationships

MAKE THINGS HAPPEN
Takes responsibility for personal organisation and achieving results

FLEXIBLE
Adapts to change and works effectively in a variety of situations

LEARN AND DEVELOP
Actively improves by developing and applying new skills and knowledge and learns from past experiences

