Role summary

A Senior Data Engineer at Foster + Partners will need to have proficiency in various data warehousing (lakehouse), relational databases, ETL, big data, cloud computing, programming languages, and machine learning technologies and tools. You'll be passionate, pragmatic and ready for a new challenge.

Role Definition

Job title: Senior Data Engineer

Reporting to: Head of Information Systems to the Head of Technology

Responsibilities

- Designing and implementing data models, pipelines, and solutions for existing and new data systems
- Work with the Head on Information System and the data team to implement technical solutions in line with the team data vision
- Orchestrate data migration as and when required
- Able to take complex problems and break these down to implement effective solutions
- Troubleshooting and resolving data management issues across teams
- Collaborating with data architects, analysts, and scientists to determine design and data needs
- Ensuring data compliance and security standards are met in system construction
- Performing data validation testing and generating reports on data quality and performance
- Recommending and deploying new technologies and tools for data engineering
- Developing and improving data engineering capabilities and best practices
- Maintain confidentiality with regard to the information being processed, stored, or accessed by the network
- Contribute, or otherwise assist, as required.
- Equity, diversity & inclusion (EDI) is a core priority. To support and champion the embedding of this focus as a collective workforce responsibility, EDI should be integrated, where relevant, into all workstreams.
- Thorough knowledge of and compliance with F+P procedures and standards.

Qualities and Skills required

- Legally able to work in the country in which the position is based.
- Excellent organisational skills.
- Able to manage sensitive and sometimes confidential information.
- Able to demonstrate ability to undertake the above responsibilities.
- Able to demonstrate initiative and a proactive approach to daily tasks.
- Good interpersonal skills and able to work independently and as part of an effective team.
- Flexible attitude.
- Able to build good relationships at all levels, internally and externally.
- Resilient to cope with conflicting demands, able to prioritise duties and work effectively under pressure.
- Able to work as part of an effective team assisting and supporting team members.
- Experience with Dynamic ADF Pipelines (Integration Runtimes, Linked Services, Datasets, and copy tasks).
- Proficiency in Python, with a keen eye for best practices.
- Experience with Databricks and Spark.
- Experience in extracting data from REST APIs.

- Proficiency in Spark SQL or other SQL languages.
- Experience with Azure Resources and managing resources in Azure (AWS or GCP are also acceptable).
- Familiarity with Azure DevOps and/or other git / project management tools.
- Strong understanding of Data Modelling, including Dimensional Modelling.
- Experience with Power BI and DAX, and understanding the implication of data modelling on these areas.
- Demonstrated ability to implement not only functional solutions, but solutions that are robust, scalable, and maintainable, with an emphasis on best practices, both in solution design, and at a code level.
- Fast learning and ability to think laterally
- Proactive thinking and 'can do' attitude
- Self-motivated and able to take responsibility
- Strong communication skills
- Contribute, or otherwise assist, as required.
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- An understanding of Terraform and/or infrastructure as code
- Basic understanding of metadata driven data pipelines
- An exposure to modelling data within Data Vaults
- Basic understanding of cloud networking
- Basic understanding of Object-Oriented Programming (OOP)
- An understanding of Unity Catalog and its role within Databricks

This description reflects the core activities of the role but is not intended to be all-inclusive and other duties within the group/department may be required in addition to changes in the emphasis of duties as required from time to time. There is a requirement for the post holder to recognise this and adopt a flexible approach to work. Job descriptions will be reviewed regularly and where necessary revised in accordance with organisational needs. Any major changes will be discussed with the post holder.