**Job Description**

**NHS Professionals Limited**

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| Job Title: Lead Data Engineer | |  |
| **Band: Level 3** |  | |
| **Location: Hemel Hampstead** |  | |

**Role summary:**

As Lead Data Engineer, you will lead the development of data pipelines across NHS Professionals (NHSP) with your extensive experience architecting enterprise data solutions on Azure cloud platform and SSIS. You can demonstrate deep expertise in designing and implementing ETL pipelines using Azure services (Synapse Analytics, Data Factory, Databricks and SQL Database) and SSIS package development, while having a proven track record of leading teams, migrating legacy systems to cloud, implementing data governance, and optimizing costs.

You have high proficiency in SQL, Python, Spark, and SSIS scripting, along with 6+ years of hands-on data engineering experience. Key responsibilities include architecting Azure-based data solutions, optimizing ETL processes, leading platform modernization initiatives, establishing data governance standards, managing cloud infrastructure costs, and mentoring junior engineers. The role demands strong leadership skills to drive best practices in data modeling, CI/CD implementation, and collaboration with stakeholders on technical requirements.

In this role, you'll regularly interact with senior leadership, requiring both deep technical knowledge and polished communication skills. Your ability to translate complex technical challenges into clear, accessible explanations will be crucial for effective decision-making and stakeholder alignment.

**Organisational Position (Illustrative):**

**Key responsibilities:**

Technical Architecture:

* Design comprehensive data solutions leveraging Azure's core services including Synapse Analytics, Fabric, Data Factory, and Azure SQL DB to create scalable data platforms.
* Design end-to-end architectures implementing data mesh principles while ensuring cost optimization and performance efficiency across all integrated Azure services.

Data Governance & Security:

* Establish comprehensive data governance frameworks through Azure Purview
* Implement robust security standards and compliance controls.
* Work close with wider IT and business on data lifecycle management, retention policies, and access controls with particular emphasis on sensitive data protection.
* Continuously monitor audit compliance and risk management to maintain data integrity and security across the platform.

Development & Operations:

* Design and implement robust ETL/ELT pipelines using Azure components
* Establish CI/CD practices for data infrastructure deployment.
* Drive automation initiatives and monitoring solutions to ensure high system availability and disaster recovery capabilities.
* Optimize data warehouse systems through continuous monitoring and tuning.

**Key accountabilities:**

Platform & Architecture:

* Maintain platform reliability and scalability while making key technical architecture decisions that align with established standards.
* Optimize cloud infrastructure and ensure data quality and integrity across systems.
* Meet system performance targets and SLAs through continuous monitoring and improvement

Governance & Security:

* Ensure comprehensive data protection compliance and implement robust security frameworks across the platform.
* Maintain strict adherence to audit requirements while conducting regular risk assessments and implementing mitigation strategies.
* Document standards to support governance and security protocols.

Team & Delivery:

* Provide technical leadership and mentoring to junior team members
* Ensure robust technical solution for successful project delivery to agreed timeline
* Manage stakeholder relationships and expectations effectively, alongside strategic resource planning and allocation.
* Ensure delivery standards are consistently met and maintained through regular service level reporting and monitoring

**Requirements:**

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| **Competency** | **Essential or Desirable** |
| Bachelor’s degree in computing science, Mathematics, Engineering or similar subjects, with relevant certification in Azure services | Essential |
| Expert-level data development with ability to establish enterprise-scale data integration procedures and standards across an organization | Essential |
| Superior capabilities of data modeling including cross-industry standardization and metadata management | Essential |
| Advanced data analysis capabilities including complex source system analysis and data synthesis | Essential |
| Proficient in programming, testing, and building data engineering solutions using agreed standards and tools (for example, SQL, Python, Azure Synapse Analytics, ADF, Databricks, Data Lake Storage, Purview, Azure DevOps, Power BI, SSIS, SSRS) | Essential |
| Demonstrated data innovation experience with focus on identifying and adopting new tools and techniques | Essential |
| Thorough understanding of technical concepts with ability to explain how they fit into wider technical landscape | Essential |
| Experience in establishing and maintaining data standards while keeping abreast of best practices | Essential |
| Strong problem management skills with focus on investigation, resolution and preventive measures | Essential |
| Strong stakeholder management with proven ability to communicate effectively between technical and non-technical audiences | Essential |
| Proven ability to manage resources and ensure effective enterprise data services delivery | Essential |
| Experience in deploying ML models and GenAI solutions using Azure services | Desirable |

**Key Values:**

In addition to undertaking the duties as outlined above, the job holder will be expected to fully adhere to the following:

* **Equality and Diversity**

To act in accordance with NHS Professional’s Equality and Diversity Policy, this is designed to prevent discrimination of any kind.

* + **Health and Safety**

Ensure that all duties are carried out in line with NHS Professional’s Health and Safety Policy.

* + - **Corporate Image**

Adopt a professional image at all times.

* **Risk Management**

Responsibility for reporting complaints, incidents and near misses through the Complaints and Incidents Management System (CIMS)

Responsibility for attending health and safety training as required.

Responsibility for assisting with risk assessments.

* **Scheme of Delegation**

To comply the Scheme of Delegation this requires any employee to declare an interest, direct or in-direct, with contracts involving the organisation.

**Note:**

This job description outlines the roles, duties and responsibilities of the post. It is not intended to detail all specific tasks.

**Acceptance:**

I agree to undertake the duties of the job in accordance with the above:

###### Signed: ..…………………………………………..… (Job Holder)

Name: ……………………………………………… (Print)

Date: ……………….

Signed: …………………………………………… (Line Manager)

Name: ……………………………………………... (Print)

Date: ……………….

**NHS Professional Limited**

**PERSON SPECIFICATION**

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| --- | --- | --- | --- |
| **Job Title:** | Lead Data Engineer | | |
| **CRITERIA:** | **ESSENTIAL**  *(When applying for this job it is important you fulfil all these essential requirements. If you do not you are unlikely to be interviewed)* | **DESIRABLE**  *(When applying for this job it is desirable you fulfill these requirements. However, if you do not you may still apply and may be interviewed*) | **HOW IDENTIFIED**  A / C / I / P / R / T |
| **Qualifications & Knowledge:** | Bachelor’s degree in computing science, Mathematics, Engineering or similar subjects, with relevant certification in Azure services |  | A/C/I |
| **Experience:** | High proficiency in SQL, Python, Spark, and SSIS scripting, along with 6+ years of hands-on data engineering experience with Azure | Experience in deploying ML models and GenAI solutions using Azure services   * Experience working with Salesforce Data Cloud * Experience working with Tableau. | A/I/T |
| **Communication & People Skills:** | * Strong stakeholder management with proven ability to communicate effectively between technical and non-technical audiences |  | A/I/T |
| **Organisational Skills:** | Teamwork, collaboration, financial acumen |  | A/I/T |
| **Specialist Knowledge/ Skills:** | Expert-level data development with ability to establish enterprise-scale data integration procedures and standards across an organization  Superior capabilities of data modeling including cross-industry standardization and metadata management  Advanced data analysis capabilities including complex source system analysis and data synthesis  Proficient in programming, testing, and building data engineering solutions using agreed standards and tools (for example, SQL, Python, Azure Synapse Analytics, ADF, Databricks, Data Lake Storage, Purview, Azure DevOps, Power BI, SSIS, SSRS)  Demonstrated data innovation experience with focus on identifying and adopting new tools and techniques  Thorough understanding of technical concepts with ability to explain how they fit into wider technical landscape  Experience in establishing and maintaining data standards while keeping abreast of best practices  Strong problem management skills with focus on investigation, resolution and preventive measures  Proven ability to manage resources and ensure effective enterprise data services delivery |  |  |
| **Physical Skills:** |  |  | A/I |
| **Equality:** | Commitment to promoting equality of opportunity for all, through diversity, giving everyone the chance to achieve their potential, free from prejudice and discrimination. |  |  |

Key: A = Application Form C = Certificate I = Interview P = Pre-employment health screening R = References T = Tests/presentation