Job Profile

Company:	**London College of Contemporary Arts (LCCA)**
Department:	Data Analytics
Role:	Senior Data Engineer
Reporting to:	Registry / Head of BI, Data Analytics and Reporting
Location:	London, UK

Role Summary

Builds and maintains LCCA's data infrastructure, ensuring student and institutional data is securely integrated, accurate, reliable and readily available for reporting, analytics, regulatory requirements and decision-making.

Key Activities & Responsibilities

Data Engineering & Infrastructure

- Design, build and maintain scalable data pipelines across LCCA's student, admissions, finance and operational systems.
- Develop and maintain data warehouse/lakehouse structures to provide a reliable source of institutional data.
- Integrate data from internal systems and relevant third-party platforms.
- Automate data ingestion, transformation and processing to reduce manual data handling.

Data Quality & Governance

- Implement data validation and quality controls across critical datasets.
- Identify, investigate and resolve data inconsistencies and anomalies.
- Ensure data is securely managed and accessible in accordance with GDPR and institutional data governance requirements.
- Maintain documentation of data sources, pipelines, transformations and definitions.

Reporting & Analytics Enablement

- Provide reliable, structured datasets for BI reporting, statutory returns and advanced analytics.
- Work closely with BI Developers, Data Analysts and Data Scientists to understand and deliver their data requirements.
- Ensure data is available in a timely and consistent format for institutional and regulatory reporting.

AWS & Technical Development

- Develop and manage data solutions within the AWS environment.
- Utilise relevant AWS services for data storage, processing, orchestration and security.
- Optimise data pipelines and infrastructure for performance, reliability and scalability.
- Apply software engineering best practices including version control, testing, CI/CD and monitoring.

Continuous Improvement

- Identify opportunities to automate and improve LCCA's data processes.
- Reduce reliance on manual Excel-based data preparation and reconciliation.
- Support the development of a scalable data architecture capable of supporting LCCA's future requirements.

Qualifications/Education

Essential

- Experience within Higher Education or another regulated environment.
- Experience with student information systems and/or HESA/OfS data.
- Strong commercial experience in data engineering.
- Advanced SQL and Python.
- Experience designing and managing ETL/ELT data pipelines.
- Strong understanding of data warehouse architecture and data modelling.
- Hands-on experience with AWS data services and cloud infrastructure.
- Experience implementing data quality, testing and monitoring processes.
- Strong understanding of data security and governance.

Desirable

- Experience with AWS services such as S3, Redshift, Glue, Lambda, Step Functions and CloudWatch.
- Experience supporting Power BI environments.

Knowledge & Skills

Technical Skills and Relevant Technologies

- Proficiency in AWS data services (Redshift, Glue, Lambda, S3).
- Strong SQL skills and experience with data warehousing.
- Experience integrating data from multiple source systems.
- Knowledge of data governance, quality frameworks, and security practices.

Soft Skills and Cultural Fit

- Strong problem-solving and analytical thinking capabilities.
- Ability to translate technical outputs into actionable insights for business stakeholders.
- Excellent collaboration and communication skills, with the ability to work across academic and operational teams.
- Pragmatic, results-driven mindset with focus on quality and delivery.

Experience

- 5+ years of professional experience as a Data Engineer.
- Proven track record of designing and maintaining data pipelines.
- Experience in cloud-based data environments (AWS preferred).