Data Analyst
Job Description

Overview:

We are seeking a talented and detail-oriented Data Analyst to join our dynamic team. As a Data Analyst, you will be responsible for interpreting data, analyzing results, and providing actionable insights to drive informed decision-making across the agency. You will work closely with stakeholders to understand their data needs, develop analytical solutions, and present findings in a clear and concise manner.

Responsibilities

Data Collection and Processing

- Extract, transform, and load (ETL) data from various sources.
- Clean and preprocess data to ensure accuracy and consistency.
- Develop scripts and workflows to automate data collection and processing tasks.

Data Analysis and Interpretation:

- Perform exploratory data analysis to uncover trends, patterns, and anomalies.
- Apply statistical and analytical techniques to derive insights from complex datasets.
- Conduct hypothesis testing and predictive modeling to support business objectives.

Data Visualization and Reporting

- Create visually appealing and interactive dashboards, reports, and presentations.
- Communicate findings and recommendations to stakeholders using data visualization tools.
- Collaborate with cross-functional teams to design and deliver actionable insights.

Data Quality Assurance

- Validate data accuracy, completeness, and integrity.
- Identify and address data quality issues and discrepancies.
- Implement data quality controls and monitoring mechanisms.

Business Intelligence and Decision Support

- Partner with business units to define key performance indicators (KPIs) and metrics.
- Analyze business processes and operations to identify opportunities for improvement.
- Provide decision support through ad-hoc analysis and scenario modeling.

Continuous Learning and Development

- Stay abreast of industry trends, best practices, and emerging technologies in data analytics.
- Participate in training programs and professional development opportunities.
- Share knowledge and insights with colleagues to foster a culture of continuous learning.

Requirements:

- Bachelor's degree in Statistics, Mathematics, Computer Science, Economics, or related field. Master's degree preferred.
- Proven experience in data analysis, business intelligence, or related roles.
- Proficiency in data analysis tools and programming languages (e.g., SQL, Python, R, etc.).
- Strong analytical and problem-solving skills with attention to detail.
- Excellent communication and presentation abilities.
- Ability to work independently and collaboratively in a fast-paced environment.
- Experience with data visualization tools (e.g., Tableau, Power BI, etc.) is a plus.
- Knowledge of machine learning and data mining techniques is desirable.

Data Steward
Job Description

Overview:

We are seeking a meticulous and dedicated Data Steward to join our team. As a Data Steward, you will be responsible for managing and maintaining the integrity, quality, and security of our organization's data assets. You will play a critical role in ensuring that data governance policies and procedures are implemented effectively across the agency.

Responsibilities

Data Quality Management

- Implement and enforce data quality standards and procedures.
- Monitor data quality metrics and identify areas for improvement.
- Collaborate with data owners and stakeholders to resolve data quality issues.

Data Governance

- Develop and maintain data governance policies and procedures.
- Define data ownership and stewardship roles and responsibilities.
- Ensure compliance with data governance policies and regulatory requirements.

Data Security and Privacy

- Implement data security measures to protect sensitive information.
- Ensure compliance with data privacy regulations such as HIPAA, FERPA, etc.
- Monitor access controls and permissions to safeguard data integrity.

Data Documentation and Metadata Management

- Maintain metadata repositories and data dictionaries.
- Document data lineage, definitions, and business rules.
- Facilitate metadata discovery and data cataloging efforts.

Data Lifecycle Management

- Oversee the lifecycle of data from creation to archival or deletion.
- Develop data retention policies and procedures.
- Coordinate data archiving and purging activities as necessary.

Data Integration and Master Data Management

- Support data integration initiatives and ensure data consistency across systems.
- Collaborate with IT teams to establish master data management processes.
- Identify opportunities for data consolidation and standardization.

Data Training and Awareness:

- Provide training and guidance to users on data management best practices.
- Raise awareness of data governance principles and policies.
- Foster a culture of data stewardship and accountability across the organization.

Requirements:

- Bachelor's degree in Computer Science, Information Management, or related field. Master's degree preferred.
- Proven experience in data management, data governance, or related roles.
- Strong understanding of data quality, data governance, and data security concepts.
- Familiarity with data management tools and technologies (e.g., data cataloging tools, metadata management tools, etc.).
- Excellent communication and interpersonal skills.
- Ability to collaborate effectively with cross-functional teams.
- Strong analytical and problem-solving abilities.
- Certification in data management or related areas (e.g., CDMP, DM-BOK, etc.) is a plus.

Data Governance Lead
Job Description

Overview:

We are seeking a seasoned and proactive Data Governance Lead to spearhead our data governance initiatives and ensure the integrity, quality, and security of our organization's data assets. As the Data Governance Lead, you will be responsible for developing and implementing data governance frameworks, policies, and processes to support our strategic objectives and regulatory compliance requirements.

Responsibilities

Data Governance Strategy

- Develop and articulate the organization's data governance vision, strategy, and roadmap.
- Define data governance objectives, priorities, and key performance indicators (KPIs).
- Establish governance structures, roles, and responsibilities to support effective data stewardship and accountability.

Policy and Process Development

- Design, document, and implement data governance policies, standards, and procedures.
- Define data classification schemes, data ownership models, and data lifecycle management practices.
- Ensure alignment with regulatory requirements, industry standards, and best practices.

Data Quality Management

- Establish data quality standards, metrics, and monitoring mechanisms.
- Collaborate with data owners and stewards to identify data quality issues and root causes.
- Implement data quality improvement initiatives and corrective actions as needed.

Data Security and Privacy

- Develop and enforce data security and privacy policies, controls, and procedures.
- Ensure compliance with data protection regulations (e.g., HIPAA, FERPA, etc.) and industry standards.
- Monitor access controls, data encryption, and other security measures to mitigate risks.

Metadata Management and Documentation

- Implement metadata management processes to capture and maintain data lineage, definitions, and dependencies.
- Establish data dictionaries, glossaries, and cataloging tools to facilitate metadata discovery and documentation.

- Promote metadata standards and best practices across the organization.

Data Governance Education and Awareness
- Provide training and guidance to employees on data governance principles, policies, and procedures.
- Raise awareness of data management best practices and their importance to business operations.
- Foster a culture of data stewardship, collaboration, and continuous improvement.

Governance Oversight and Reporting
- Establish mechanisms for governance oversight, including regular reviews and audits.
- Monitor compliance with data governance policies and assess effectiveness of controls.
- Prepare and present data governance reports, dashboards, and metrics to senior leadership.

Requirements:
- Bachelor's or Master's degree in Information Management, Computer Science, Business Administration, or related field.
- Extensive experience in data governance, data management, or related roles.
- Strong understanding of data governance principles, frameworks, and best practices.
- Familiarity with regulatory requirements and industry standards related to data privacy and security.
- Excellent leadership, communication, and stakeholder management skills.
- Ability to influence and drive change in a complex organizational environment.
- Certification in data governance or related areas (e.g., DM-BOK, CDMP, etc.) is a plus.

Data Engineer
Job Description

Overview:

We are seeking a highly skilled and motivated Data Engineer to join our innovative team. As a Data Engineer, you will be responsible for designing, building, and maintaining scalable data pipelines and infrastructure to support our data-driven initiatives. You will collaborate closely with cross-functional teams to ensure the availability, reliability, and performance of our data systems and solutions.

Responsibilities

Data Pipeline Development

- Design, implement, and optimize end-to-end data pipelines for ingesting, processing, and transforming large volumes of structured and unstructured data.
- Develop robust ETL (Extract, Transform, Load) processes to integrate data from diverse sources into our data ecosystem.
- Implement data validation and quality checks to ensure accuracy and consistency.

Data Modeling and Architecture

- Design and maintain data models, schemas, and database structures to support analytical and operational use cases.
- Optimize data storage and retrieval mechanisms for performance and scalability.
- Evaluate and implement data storage solutions, including relational databases, NoSQL databases, data lakes, and cloud storage services.

Data Integration and API Development

- Build and maintain integrations with internal and external data sources and APIs.
- Implement RESTful APIs and web services for data access and consumption.
- Ensure compatibility and interoperability between different systems and platforms.

Data Infrastructure Management

- Configure and manage data infrastructure components, including databases, data warehouses, data lakes, and distributed computing frameworks.
- Monitor system performance, troubleshoot issues, and implement optimizations to enhance reliability and efficiency.
- Implement data security controls and access management policies to protect sensitive information.

Collaboration and Documentation

- Collaborate with data scientists, analysts, and other stakeholders to understand data requirements and deliver tailored solutions.

- Document technical designs, workflows, and best practices to facilitate knowledge sharing and maintain system documentation.
- Provide technical guidance and support to team members and stakeholders as needed.

Requirements:

- Bachelor's degree in Computer Science, Engineering, Information Systems, or related field. Master's degree preferred.
- Proven experience in data engineering, software development, or related roles.
- Proficiency in programming languages commonly used in data engineering (e.g., Python, Java, Scala, etc.).
- Strong knowledge of database systems, data modeling techniques, and SQL proficiency.
- Proficiency with ETL tools commonly used in data engineering (e.g., SSIS, Databricks, Azure Data Factory).
- Experience with big data technologies and frameworks (e.g., Hadoop, Spark, Kafka, etc.).
- Familiarity with cloud platforms and services (e.g., AWS, Azure, Google Cloud Platform, etc.).
- Excellent problem-solving skills and attention to detail.
- Effective communication and collaboration skills in a team-oriented environment.
- Ability to adapt to evolving technologies and business requirements.

Data Curation Analyst
Job Description

Overview:

We are seeking a detail-oriented and analytical Data Curation Analyst to join our team. As a Data Curation Analyst, you will play a crucial role in ensuring the accuracy, completeness, and usability of our organization's data assets. You will be responsible for curating and managing data collections, performing quality assessments, and implementing best practices for data organization and documentation.

Responsibilities

Data Collection and Aggregation
- Identify, collect, and aggregate data from internal and external sources.
- Collaborate with data owners and stakeholders to understand data requirements and priorities.
- Develop processes and workflows for efficient data acquisition and ingestion.

Data Quality Assessment:
- Perform data quality assessments to identify errors, inconsistencies, and anomalies.
- Implement data validation checks and quality control measures to ensure data accuracy and reliability.
- Work with data producers to address data quality issues and improve data integrity.

Data Standardization and Enrichment
- Standardize data formats, naming conventions, and coding schemes for consistency.
- Enrich datasets with additional metadata, annotations, and contextual information.
- Enhance data documentation and descriptions to improve discoverability and usability.

Data Cleansing and Transformation
- Cleanse and preprocess data to remove duplicates, outliers, and irrelevant information.
- Transform data into standardized formats and structures for analysis and integration.
- Implement data enrichment techniques such as imputation, normalization, and feature engineering.

Data Cataloging and Metadata Management
- Maintain data catalogs, metadata repositories, and documentation libraries.
- Capture and document metadata attributes, including data lineage, provenance, and usage.
- Facilitate metadata discovery and search capabilities for end users and data consumers.

Data Governance and Compliance
- Ensure compliance with data governance policies, regulations, and best practices.
- Implement access controls, permissions, and security measures to protect sensitive data.

- Monitor data usage and access patterns to enforce governance policies and controls.

Collaboration and Communication
- Collaborate with cross-functional teams, including data engineers, analysts, and scientists.
- Communicate effectively with stakeholders to understand data requirements and priorities.
- Provide training and support to users on data curation best practices and tools.

Requirements:
- Bachelor's degree in Information Science, Library Science, Computer Science, or related field.
- Proven experience in data curation, data management, or information management roles.
- Strong understanding of data quality principles, standards, and methodologies.
- Proficiency in data manipulation tools and technologies (e.g., SQL, Python, R, etc.).
- Familiarity with data modeling concepts, metadata standards, and taxonomies.
- Excellent organizational, analytical, and problem-solving skills.
- Ability to work independently and collaboratively in a fast-paced environment.
- Attention to detail and commitment to data accuracy and integrity.