



<b>DATE</b>	JULY 2024
<b>JOB CODE</b>	
<b>FLSA</b>	EXEMPT
<b>EEO</b>	

**JOB TITLE:** Data & AI Engineer  
**DEPARTMENT/DIVISION:** Information Technology  
**REPORTS TO:** Data & AI Manager

**SUMMARY:** The Data & AI Engineer is responsible for managing and optimizing both on-premises and cloud-based databases and data lakehouses within Azure and Databricks environments. This role includes developing and maintaining data pipelines, managing AI applications such as chatbot development, and employing machine learning techniques to enhance system performance and capability. This position will also handle routine database administration duties, ensuring high levels of performance and security.

**ESSENTIAL JOB FUNCTIONS:**

- Install, configure, and upgrade database server and application tools in both on-premises and cloud environments.
- Design and manage robust data pipelines for data integration and workflow automation.
- Develop and monitor AI solutions, focusing on chatbots and machine learning models to drive business solutions and enhance user interaction.
- Allocate system storage and plan future storage requirements for database systems and data lakehouses.
- Maintain system security, ensure compliance with database vendor license agreements, and control user access.
- Monitor and optimize the performance of databases and AI applications.
- Plan and execute data backup and recovery strategies; maintain archived data.
- Support application developers by modifying database structures as needed.
- Liaise with database vendors for technical support and manage relationships.
- Ensure compliance with external regulatory controls and organizational data policies.
- Participate in special projects, providing technical expertise and recommendations to enhance organizational efficiency and sustainability.
- Performs other duties as assigned, which may involve irregular work hours, including evenings and weekends.

**KNOWLEDGE, SKILLS, AND ABILITIES:**

- Knowledge of database theory
- Knowledge of database design
- Knowledge about the RDBMS itself, e.g. Oracle Database, Microsoft SQL Server, IBM Informix

- Knowledge of Structured Query Language (SQL)
- Knowledge of distributed computing architectures, e.g. Client/Server, Internet/Intranet, Enterprise
- Knowledge of the underlying operating system, e.g. Windows, Linux
- Knowledge of storage technologies, memory management, disk arrays, NAS/SAN, networking
- Knowledge of routine maintenance, recovery, and handling failover of a Database
- Knowledge of disaster and business recovery practices
- Knowledge of government operations and processes
- Skilled in managing cloud-based technologies, particularly in Azure and Databricks environments.
- Skilled in designing secure networks, systems, and applications architecture
- Skilled in evaluating quality and reviewing final work products
- Skilled in analyzing security processes
- Skilled in assessing cost efficiency and effectiveness of municipal operations
- Skilled in tracking service call and installations
- Skilled in identifying and solving problems
- Skilled in documenting service outages and resolutions
- Skilled in working independently or part of a team in delivering excellent customer service
- Skilled in reading and interpreting technical documents
- Skilled in applying independent judgment, personal discretion, and resourcefulness in interpreting and applying guidelines
- Skilled in reading, interpreting, applying, authoring and explaining rules, regulations, policies, and procedures
- Skilled in preparing clear and concise reports
- Skilled in gathering and analyzing information and making recommendations based on findings and in support of organizational goals
- Skilled in operating a computer and related software applications
- Skilled in communicating effectively with a variety of individuals
- Ability to communicate with users to define system requirements and resolve problems
- Ability to analyze technical problems and develop workable solutions

#### **MINIMUM QUALIFICATIONS:**

- Bachelor's degree in a related field of study or equivalent work experience
- 1 year of progressively responsible information technology experience
- CompTIA Security+ certification or equivalent upon management approval within 1 year of employment.
- 1 or more of the following certifications (or substantially similar) or ability to obtain within 1 year of employment;
  - Microsoft Certified: Azure AI Engineer Associate
  - Microsoft Certified: Azure Data Engineer Associate
  - Microsoft Certified: Azure Database Administrator Associate

- Must qualify for and maintain compliance with Criminal Justice Information Systems access requirements
- Must possess or be able to obtain and maintain a valid Texas driver's license

**PREFERENCES:**

- 2-3 years' experience in database and AI systems management, preferably with hands-on experience in Azure and Databricks.
- Advanced certifications in data platform technologies and Linux environments.

**WORKING CONDITIONS:**

- Frequent reaching, sitting, talking, seeing, hearing, and manual dexterity
- Occasional climbing, balancing, stooping, kneeling, and crouching
- Sedentary office and outdoors work environments
- Occasional lifting and carrying up to 50 pounds
- Work may be performed in a data-center environment, involving loud noise and temperature irregularity

Work both indoors and outdoors and are exposed to cold and hot temperatures, constant noise, fume/odor hazards, road hazards, heights, and mechanical and electrical hazards.

**CONDITIONS OF EMPLOYMENT:**

- Must pass pre-employment drug test.
- Must pass criminal history check.
- Must pass motor vehicle records check.