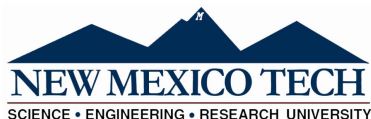


Posted: August 13, 2024



POSITION ANNOUNCEMENT

TITLE: DATABASE ADMINISTRATOR/DEVELOPER **DEPT:** BUREAU OF GEOLOGY

REG **TEMP** **FULL TIME** **PART TIME**

STARTING RATE or SALARY RANGE \$68,000-\$75,000

Employees being promoted to a higher classified position receive the minimum for the position or a pay rate adjustment of 8% whichever is greater.

All regular positions also entitle the employee to several benefits including health, dental, vision, life insurance, and retirement which is largely paid by New Mexico Tech for the employee and dependents.

INTERNAL POSTING THROUGH: August 24, 2024* CONSIDERATION WILL BE GIVEN FIRST TO TEMPORARY AND REGULAR TECH EMPLOYEES WHO APPLY WITHIN THE 7 DAY INTERNAL POSTING. APPLICATIONS RECEIVED AFTER THE 7 DAY POSTING MARGIN WILL BE CONSIDERED WITH OTHER OUTSIDE APPLICANTS.

JOB SUMMARY:

We are seeking a talented Data Engineer to join our Bureau of Geology team, specifically supporting our Hydrogeology/Aquifer Mapping Program. As a Data Engineer, you will play a crucial role in designing, developing, and maintaining robust data infrastructure and pipelines that support the acquisition, integration, and analysis of geospatial and hydrogeological data.

JOBS FUNCTIONS:

Database management: Maintain, support, and develop improvements for subsurface databases and aquifer mapping currently using MS SQL Server, MS Access, and geospatial databases. Optimize database performance and query efficiency by tuning SQL queries, indexing strategies, and partitioning techniques.

50%

Database development: Provide business analysis, technical design, and implementation of data management systems to support current and future challenges. Design and develop data pipelines to extract, transform, and load (ETL) geospatial and hydrogeological data from various sources into our data warehouse or data lake.

35%

Backend development: Support the development of interactive maps, visualizations, and analytical tools for hydrogeological studies and mapping projects, through the development and deployment of web APIs. 15%

REQUIRED QUALIFICATIONS:

Associate's degree or completion of program 18+ months after high school, Database Technologies, IT, Computers Science or related field. May substitute degree with professional experience and/or industry certifications. Proficiency in languages such as Python, Java, Scala, or similar languages used for data manipulation, ETL processes, and data pipeline development. Strong understanding of relational databases (e.g., PostgreSQL, MySQL) and experience with writing complex SQL queries. Familiarity with NoSQL databases (e.g., MongoDB, Cassandra) is also beneficial. Must be capable of quick learning, close collaboration and have excellent interpersonal and organizational skills. Ability to plan and manage multiple database projects, tasks and schedule time. Experience with database design and normalization/standardization techniques. Ability to design and implement scalable data models, data warehouses, and data lakes. Knowledge of dimensional modeling and schema design principles. MySQL, MSSQL, PostgreSQL, Python

DESIRED QUALIFICATIONS:

Bachelor's & Master's Degree. Knowledge of, or interest in the hydrological or geological sciences. Experience with cloud platforms such as AWS, Azure, or Google Cloud Platform (GCP) and familiarity with services like

EC2, S3, Lambda, Data Factory, etc., for deploying data solutions. Experience with Extract, Transform, Load (ETL) processes and tools (e.g., Airbyte, Apache Airflow) to automate data workflows and integrate data from various sources. Knowledge of data quality assessment, data profiling, and data governance principles to ensure data accuracy, integrity, and compliance.

LIFTING REQUIREMENTS:

(f)requently, (o)ccasionally, or (s)eldom

0 - 15 pounds	F
15 - 30 pounds	F
30 - 50 pounds	O
50 - 100 pounds	S
100 + pounds	S

PHYSICAL DEMANDS:

Standing 15%	Sitting 75%	Walking 10%	Pulling
Pushing	Lifting	Stooping	Kneeling
Crawling	Climbing	Reaching	Other

Apply to: nmtjobapps@npe.nmt.edu