# City of Fort Worth, Texas Job Description

Classification Title	Data Science Analyst II		
Job Code:	PR5920	Job Family:	Professional
Pay Grade	709	Date Reviewed:	3/26/2024
FLSA Status	Exempt	Date Revised:	

### GENERAL SUMMARY

Conducts analysis, evaluation, and research of various data streams and utilizes large data sets to determine unique insights to further business needs. Provides analytical information to management regarding department procedures, processes, and structure to assist management in organization improvement. Collaborates closely with team members and plays a pivotal role in refining our data processes, mentoring newer analysts, and ensures that our analyses are both comprehensive and comprehensible.

## ESSENTIAL DUTIES & RESPONSIBILITIES

The intent of this job description is to provide a representative summary of the major duties and responsibilities performed by incumbents of this job. Incumbents may be requested to perform job-related tasks other than those specifically presented in this description.

- 1. Utilizes predictive modeling techniques to anticipate future trends.
- 2. Extracts meaningful information using advanced tools and techniques. Recognizes and interprets more complex data structures.
- 3. Designs and implements A/B testing or multivariate testing processes to evaluate the efficacy of different strategies. Recommends adjustments based on findings for better outcomes.
- 4. Becomes proficient with more advanced data analytics and visualization tools; Customizes tools and software to streamline data analysis processes.
- 5. Leads and participates in cross-functional projects and collaborates with multiple departments.
- 6. Creates detail and variation reports. Explains complex insights to non-technical stakeholders in a clear and concise manner.
- 7. Works closely with the IT department in optimizing database queries. Aids in the maintenance and improvement of data storage solutions.
- 8. Identifies opportunities to refine analysis processes and methodologies. Introduces new techniques or tools to enhance data analysis capabilities.
- 9. Engages more actively with key stakeholders to better understand their data needs.
- 10. Performs other related duties as required.

11. Adheres to assigned work schedule as outlined in the Department and City attendance policies and procedures; ensures all behaviors comply with the City's Personnel Rules and Regulations.

# **KNOWLEDGE, SKILLS & ABILITIES**

### • Knowledge of:

- Data management and systems.
- Data science analytics.
- > Data warehousing and data engineering.
- GIS and other analysis tools.
- > Programming tools Python, R, or SQL.
- > Machine learning and artificial intelligence.
- Big data technologies (e.g., Hadoop, Spark).
- Cloud computing platforms (e.g Azure)
- Best practices in data storytelling and effective communication of analytical findings to non-technical stakeholders.
- > Data quality assessment and data cleansing techniques.

# • Skill in:

- > Organization and time management.
- Forecasting, planning and analysis.
- > Teamwork and partnership building.
- > Data visualization tools (e.g., Tableau, Power BI)
- > Data analysis tools and technologies, such as R, SAS, SPSS, or Hadoop
- > Specific data sources, such as CRM systems or ERP systems
- Specific data analysis techniques, such as machine learning, natural language processing, or statistical analysis Computer programming, database querying and dashboarding.
- > Data preprocessing and feature engineering to enhance model performance.
- > Data security practices and methods to protect sensitive information.
- > Data governance and compliance with data-related regulations.
- Knowledge transfer and training to empower non-technical colleagues in using data tools.
- > Data integration across various data sources and formats.

## • Ability to:

- Work independently and as part of a team
- > Communicate clearly and effectively, both orally and in writing.
- > Use computers and applicable software.
- Provide source data analytics to facilitate business needs.
- Research, investigate, and identify data issues.
- > Manage data analytics projects and timelines.
- > Prepare clear and concise reports.
- Create and deliver presentations.
- > Establish and maintain effective working relationships.
- > Work under pressure and solve problems.
- > Familiarity and experience in agile and scrum.
- > Stay updated on emerging trends and technologies in data science and analytics.

> Adapt to rapidly changing business requirements and data landscapes.

### MINIMUM JOB REQUIREMENTS

Bachelor's Degree from an accredited college or university with course work in Computer Science, Finance, Economics, Public Administration, Business Administration, Information Technology, or related field and two previous working experience required.

#### OTHER REQUIREMENTS

None.

#### **WORKING CONDITIONS**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Depending on assignment, positions in this class typically require touching, talking, hearing, seeing, grasping, standing, stooping, kneeling, crouching, reaching, walking and repetitive motions.

#### PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Light Work – Depending on assignment, positions in this class typically exert up to 20 pounds of force occasionally, up to 10 pounds of force frequently, and/or a negligible amount of force constantly having to move objects. If the use of arm and/or leg controls requires exertion of forces greater than that for the Sedentary Work category and the worker sits most of the time, the job is rated Light Work.