Data Scientist I

Job Code	20000731	**Job Family**	Data Strategy & Analytics	**Professional / Knowledge Worker**	
Department	Data & Analytics	**Reports to**	Sr Mgr Data & Analytics	**Union Status**	Non-Represented
FLSA Status	Exempt	**Pay Grade**	2060	**This Job is a Lead**	No
Last Updated	12/1/2022				

Accountability for Workplace Culture

Our PUD values are at the center of our culture. Putting the safety, health, and well-being of our communities and those we work with is valued above all else and everyone on Team PUD must meet this commitment daily. Nothing we do in achieving our Mission is worth a single injury, and all who interact with us must feel they are valued and welcomed as individuals.

Everyone on Team PUD, in all positions, is accountable for achieving this safe and welcoming culture by:

1. Taking full ownership for the safety of themselves and their coworkers, while ensuring everyone feels valued and welcomed.
2. Taking action to identify and eliminate their own and others' at-risk behaviors, including the behaviors that may undermine another's feelings of being welcomed and valued.
3. Following all safety rules and regulations and ensuring the PUD's expectations for conduct and respect are maintained.
4. Openly sharing near-misses, safety learning opportunities, and ways we can learn to be a more welcoming place while encouraging others to do the same.
5. Utilizing Stop Work Authority to intervene with anyone, anytime, in any place.
6. Intervening or seeking guidance to stop actions that are harmful to the wellbeing, health, or sense of belonging of others, and which are detrimental to our PUD values.

Job Summary

Provides deep knowledge discovery through data inference and exploration. Uses mathematic and algorithmic techniques to solve analytically complex business problems and enables intelligent strategy development, leveraging large sets of raw information to identify otherwise hidden insights. Works with business stakeholders to identify data science use cases and expected outcomes. Models and frames meaningful business scenarios which materially impact critical business processes and/or decisions. Operationalizes data science concepts into day-to-day operations to drive insights and continual improvement.

Accountabilities

Accountability #1

Position specific: Facilitate the core data science analysis and discovery services, facilitate key business partner collaborations and conduct strategic data science use case development; manage the data science technology stack while maintaining standards in data science analysis techniques, big data engineering, and analytic design; provide input into analytic architectural strategy; contribute to the work management planning process; and lead strategic data science projects, and similar responsibilities.

Accountability #2

Fiscal Management: Ensures development of technology systems to ensure the delivery of cost effective and efficient maintenance through adhering to best practices and standards on behalf of our customers and stakeholders. Ensures system meet reliability and availability Key Performance Metrics. Designs solutions that provide value and continually enhance operational processes. Ensures vendor management to ensure adherence to contract terms and service levels. Provides direction to strategic planning to gain the most value from contract negotiations and vendor relationships for solution implementation and ongoing operations, and similar responsibilities.

Accountability #3

Operations: Ensures the configuration, administration, support and maintenance of the District's computer systems. Install, develops, set up, and tests hardware and software systems. Troubleshoots and resolves technical issues as they arise. Provides customer support by responding to all technology requests. Generally, leads on development, change decisions and troubleshooting for high risk systems and enterprise wide business impacts, and similar responsibilities.

Accountability #4

Business Innovation & Continual Improvement: Ensure all aspects of implementation of enterprise system changes based on business needs. Develops technology strategies to support District strategic

initiatives. Leads and manages all aspects of implementation of enterprise system changes based on business needs, providing technical expertise to support the analysis, evaluation of options, and solutions. Responsible for configuration/develop/administration, test, and documentation to ensure delivery of quality technical solutions that reliably and sustainably meet the needs of the Organization. Provides mentorship to team members. Generally, works on changes with high risk and business impact, and similar responsibilities.

Accountability #5

Cyber Security (Security, PII and Confidentiality)/ Compliance: Ensure the operations and strategic direction of technological systems, processes and data are cyber secure on behalf of our customers and stakeholders by providing leadership to staff in adhering to operational best practices and designs standards for cyber security and privacy of PII data; seeks the best possible cyber security and privacy of data in vendor relationships, contract negotiations and project requests; and providing direction to strategic planning to prepare us for future cyber security and confidentiality solutions, and similar responsibilities.

Accountability #6

Collaboration and Customer Service: Provides customer service (internal and external) through effective communication and collaboration to ensure analytic and technology needs are met to support District's mission in providing reliable and cost-effective service. Builds and maintains effective relationships with stakeholders inside and outside the organization (e.g., customers, peers, cross-functional partners, external vendors, alliance partners). Contributes to building and sustaining an inclusive and equitable working environment by supporting all District employees. Actively supports and encourages every team member to share their ideas in an open and inclusive manner, and similar responsibilities.

Accountability #7

Accountability #8

Accountability #9

Accountability #10

Minimum Qualifications Note

The minimum qualifications listed below are representative of the knowledge, skills, and abilities needed to perform this job successfully, as described in the Accountabilities. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential Accountabilities (duties and responsibilities) of this position. If you need assistance and/or a reasonable accommodation due to a disability during the application or recruiting process, please contact Human Resources at HRRecruiting@snopud.com, or by phone at 425-783-8655.

Qualifications – Education and Experience

Minimum **Required Education and Experience:**

PhD in Mathematics, Statistics, Computer Science, Data Science, Economics, Operations Research, Physics, or related field, AND
Two (2) years of directly related experience applying advanced quantitative skills to complex datasets;

OR

MSc in Mathematics, Statistics, Computer Science, Data Science, Economics, Business or Operations Research, or related field, AND
Four (4) years of directly related experience applying advanced quantitative skills to complex datasets;

OR

Bachelor's Degree in Mathematics, Statistics, Computer Science, Data Science, Economics, Business or Operations Research, or related field, AND
Six (6) years of directly related experience applying advanced quantitative skills to complex datasets.

Preferred **Education and Experience:**

Qualifications – License(s) and/or Certification(s)

Minimum **Required License(s) and/or Certification(s):**

***Preferred* License(s) and/or Certification(s):**

Qualifications – Skills and Abilities

***Minimum* Required Skills and Abilities:**

Lead and advise others in data science techniques such as propensity modeling, cluster analysis, machine learning, AI, optimization and simulation
Lead and advise others in the use of SQL, Python or R
Lead and advise others in the application and administration of the enterprise data science technology landscape
Demonstrate expertise in the principles and practices of complex data engineering techniques and workflows in on-premise database and cloud data lake environments
Demonstrate expertise in the principles and practices of complex data modeling including logical and physical data modeling concepts, relational and dimensional data modeling techniques
Demonstrate expertise in the understanding of UI and visualization design techniques
Demonstrate expertise and provide leadership in the direction of enterprise analytic visualization tools
Demonstrate expertise and provide leadership in the direction of operational reporting tools
Demonstrate expertise and provide leadership in the direction of data engineering, data science workflow, or integration tools
Collaborate on strategic direction opportunities with leadership and develop key data science use cases to discover opportunities and optimize business capabilities
Demonstrate intellectual curiosity and attention to detail
Demonstrate understanding in applying Agile Scrum project framework
Demonstrate business acumen through an understanding of business and operation's concepts, processes and the systems that support them
Applies expert knowledge and is an advisor in the technical analysis of highly complex system related problems that may span multiple systems and provide resolution options
Review vendor maintenance notifications and associated action plans and determine and implement appropriate actions
Serves in an expert advisor role between business, technical staff, management, and vendors regarding service requests, change requests, usage, standards, and security
Lead and influence others in the application of industry specific business planning concepts and practices in decision making and carrying out job responsibilities
Communicate with audiences of varying levels demonstrating solid business oral, writing and presentation skills
Interpret technical information and explain in understandable terms
Perform critical thinking using a structured approach to problem identification, analysis, and solution identification
Use independent and discretionary judgment and apply risk and impact analysis in decision

making
Work with and maintain confidential information
Work collaboratively in a team environment with a commitment to the overall success of the group
Designs complex data science workflow solutions and provides direction in analytic technology architectural direction
Manage vendor deliverables and expectation to achieve successful outcomes
Consults and designs data science solutions that drive discovery and continual improvement across the enterprise

Preferred **Skills and Abilities:**

Competencies

The following competencies describe the cluster of behaviors associated with job success in the job group identified as “Professional / Knowledge Worker”.

- Adaptability
- Building Customer Loyalty
- Building Partnerships
- Communication
- Continuous Improvement
- Continuous Learning
- Courage
- Decision Making
- Earning Trust
- Emotional Intelligence Essentials
- Facilitating Change
- Influencing
- Initiating Action
- Innovation
- Leveraging Feedback
- Mentoring
- Planning and Organizing
- Positive Approach
- Professional Knowledge and Aptitude
- Stress Tolerance

- Technology Savvy
- Valuing Differences
- Work Standards

Physical Demands

Physical Demands List	Frequency
Sit	Frequent (34-66%)
Walk	Occasional (11-33%)
Stand	Occasional (11-33%)
Drive	Seldom (1-10%)
Work on ladders	Never
Climb poles or trees	Never
Work at excessive heights (note heights in open text box below)	Never
Twist	Never
Bend/Stoop	Never
Squat/Kneel	Never
Crawl	Never
Reach	Never
Work above shoulders (note specific activity in open text box below)	Never
Use Keyboard /mouse	Constant (67-100%)
Use wrist (flexion/extension)	Never
Grasp (forceful)	Never
Fine finger manipulation	Never
Operate foot controls	Never
Lift (note weight in open text box below)	Never
Carry (note weight in open text box below)	Never
Push/Pull (note specifics in open text box below)	Never
Work rapidly for long periods	Never
Use close vision	Constant (67-100%)
Use distance vision	Seldom (1-10%)
Use color vision	Frequent (34-66%)
Use peripheral depth perception	Seldom (1-10%)
Speak	Frequent (34-66%)
Hear	Frequent (34-66%)

Additional Physical Demands not listed above and associated frequency below.

Mental Demands

Communication	**Frequency**
Understand and carry out simple oral instructions	Frequent (34-66%)
Understand and carry out complicated oral instructions	Occasional (11-33%)
Train other workers	Occasional (11-33%)
Work alone	Frequent (34-66%)
Work as a member of a team	Frequent (34-66%)
Follow standards for work interactions	Constant (67-100%)
Write communications for clarity and understanding	Constant (67-100%)
Speak with clarity with others	Constant (67-100%)
Comprehension	**Frequency**
Read and carry out simple instructions	Frequent (34-66%)
Read and carry out complicated instructions	Frequent (34-66%)
Retain relevant job information	Constant (67-100%)
Reasoning	**Frequency**
Read and interpret data	Constant (67-100%)
Count and make simple arithmetic additions and subtractions	Frequent (34-66%)
Use intermediate and/or advanced math	Frequent (34-66%)
Organization	**Frequency**
Plan own work activities	Frequent (34-66%)
Plan work activities of others	Occasional (11-33%)
Direct work activities of others	Constant (67-100%)
Resilience	**Frequency**
Work under pressure	Occasional (11-33%)
Work for long periods of time	Occasional (11-33%)
Work on several tasks at the same time	Frequent (34-66%)

Additional Mental Demands not listed above and associated frequency below.

Work Environment

Environmental Conditions List	Frequency
Exposure to weather	Never
Wet and/or humidity	Never
Atmospheric conditions	Never
Confined/restricted working environment	Never
Vibratory Tasks – High	Never
Vibratory Tasks – Low	Never

Additional Environmental Conditions in this job not listed above and the associated frequency below.

Risk Conditions List	Frequency
Exposure to Heights	Never
Exposure to Electricity	Never
Exposure to Toxic or Caustic Chemicals	Never
Working with Explosives	Never
Exposure to Radiant Energy	Never
Extreme Cold	Never
Extreme Hot	Never
Proximity to Moving Mechanical Parts	Never
Noise Intensity	Never
Exposure to animals	Never
Working with angry customers	Never

Additional Risk Conditions present in this job not listed above and the associated frequency below.

On-Call Status and Frequency

On-Call is required.

⊙ Yes

○ No

On-call activities and frequency.

Work Location

The primary assignment for this position is:

⊙ Remote
○ Office Hybrid
○ On-Site
○ Field/Job Site

While this description has provided an accurate overview of responsibilities, it does not restrict management's right to assign or reassign duties and responsibilities to this job at any time. This position description is designed to outline primary duties, qualifications, and job scope, but not limit our employees or the organization to complete the work identified. In order to serve our customers best, each employee will offer their services wherever and whenever necessary to ensure the success of the District in serving our customers, to further the safety, health, and inclusivity of employees and the public, and achieve expectations of the District overall, while also remaining flexible in recognition of the employee's wellbeing.