

### DATA SCIENTIST I

**Position Status:** Exempt

**Reports To:** Advanced Analytics Manager

Effective Date: 05/29/25

Revised Date:

Job Level: P1

# **POSITION SUMMARY**

Under general supervision, this position:

- 1. Provides foundational support for AI and Data Science initiatives
- 2. Supports analytics and program evaluation across departments in collaboration with internal stakeholders
- 3. Performs other duties as assigned

# **DISTINGUISHING CHARACTERISTICS**

The Data Scientist I is the entry and first working level classification in the series and is distinguished from the next higher, full working level Data Scientist II by the latter's greater degree of independence when performing design and development of data-driven exploratory analysis and predictive and decision models and for providing technical expertise related to statistical analysis, machine learning, and data science methodologies.

# RESPONSIBILITIES

- 1. Provides foundational support for AI and Data Science initiatives, with duties including but not limited to:
  - Assisting in performing exploratory data analysis, data wrangling, and feature engineering to support predictive modeling efforts
  - Implementing basic machine learning models and statistical analyses
  - Supporting the automation of analytical workflows to support AI and data science processes
  - Supporting model validation, performance monitoring, and documentation of analytical workflows
  - Assisting in developing interactive visualizations and dashboards to communicate insights
  - Learning and applying statistical and machine learning techniques
  - Using Python and/or R to conduct statistical analyses and develop predictive models
  - Applying basic SQL queries to extract, clean, and analyze structured datasets
  - Assisting in model evaluation and tuning and learning how to assess model performance
  - Developing foundational expertise in causal inference, A/B testing, and program evaluation techniques
  - Supporting the automation of routine analytical tasks to increase efficiency
  - Developing interactive data applications and AI Tools
  - Supporting the development of Shiny or Streamlit applications to make analytics more accessible to stakeholders
  - Assisting in data visualization efforts, using tools such as Tableau, Power BI, and/or built-in R/Python libraries
  - Collaborating with senior team members to ensure effective deployment of AI-driven solutions

- 2. Supports analytics and program evaluation across departments in collaboration with internal stakeholders, with duties including but not limited to:
  - Working with teams in various departments to provide insights into provider performance, member engagement, and program effectiveness
  - Supporting risk adjustment and financial modeling efforts by assisting in predictive model development
  - Collaborating with stakeholders across Finance, Compliance, Health Services, Operations, and Information Technology Services to address data science needs
  - Contributing to process improvement initiatives, including identifying areas where AI and automation can reduce manual workloads
  - Assisting with the collection and interpretation of business requirements
  - Assisting with special projects, as assigned
- 3. Performs other duties as assigned

### **EDUCATION AND EXPERIENCE**

 Master's degree in Mathematics, Statistics, Computer Science, Data Science or a related field (a Bachelor's degree and two additional years of experience may substitute for the Master's degree); or an equivalent combination of education and experience may be qualifying

# KNOWLEDGE, SKILLS, AND ABILITIES

- Working knowledge of data wrangling and transformation techniques in Python and/or R
- Working knowledge of feature engineering, exploratory data analysis (EDA), and basic machine learning techniques
- Working knowledge of statistical software and libraries, such as Pandas, NumPy, Scikit-Learn, TensorFlow, and XGBoost
- Working knowledge of statistical analysis
- Working knowledge of and proficiency with Windows based PC systems and Microsoft Word,
  Outlook, PowerPoint, and Excel, as well as report-generating software
- Some knowledge of machine learning development and performance evaluation, and data science methodologies
- Some knowledge of version control systems, such as Git, GitHub or Azure DevOps
- Some knowledge of data visualization tools, such as Tableau, Power BI, and/or Streamlit or Shiny Web Applications
- Some knowledge of the methods of using SQL for querying structured datasets
- Ability to write clean, efficient, and reproducible code for data analysis and machine learning
- Ability to assist with the development of data science tools for risk adjustment and program evaluation
- Ability to perform program evaluation and ROI analysis
- Ability to develop and deploy interactive dashboards using Shiny or Streamlit
- Ability to apply problem-solving and critical thinking skills in an analytical environment
- Ability to perform statistical analysis and interpret findings in a meaningful way
- Ability to apply statistical models and machine learning techniques to real-world problems
- Ability to quickly learn and apply knowledge of Medicare and Medi-Cal regulations and guidelines
- Ability to interpret and apply rules, regulations, policies, procedures, and guides
- Ability to work with large, complex datasets in a structured and efficient manner
- Ability to extract insights from complex datasets to support data-driven decision-making

- Ability to assist in the development of data-driven and outcome-based initiatives to improve business decision making
- Ability to translate business problems into data science solutions
- Ability to engage with stakeholders to ensure analytical solutions align with business objectives and improve business processes
- Ability to communicate technical findings to both technical and non-technical stakeholders
- Ability to present data-driven insights clearly and concisely
- Ability to write reports and provide analytical conclusions of data
- Ability to assist with and support data science projects
- Ability to support multiple projects simultaneously, organize work, adapt to changing priorities, maintain accurate records, and achieve goals and timelines
- Ability to demonstrate flexibility and creativity, identify improvements to existing practices, and to effectively adapt to change
- Ability to continuously learn and apply new data science techniques
- Ability to work collaboratively with diverse project teams and individuals at all levels in a matrix organization
- Ability to work independently under general supervision and as a member of a team

### **DESIRABLE QUALIFICATIONS**

- Master's degree or PhD in Mathematics, Statistics, Computer Science, Data Science, or a related field
- Experience working in a health care environment
- Experience delivering Shiny or Streamlit applications
- Working knowledge of program evaluation methodologies and ROI analysis and/or A/B Testing
- Working knowledge of healthcare industry data, including claims, electronic health records, and program evaluation metrics
- Working knowledge of the principles and practices of data governance, data privacy regulations, and HIPAA compliance
- Working knowledge of healthcare standards and terminologies, such as ICD-10, CPT codes, and HL7/FHIR
- Some knowledge of generative AI, LLMs, and machine learning fundamentals, including supervised and unsupervised learning
- Some knowledge of causal inference methods and policy evaluation techniques
- Some knowledge of regulations and guidelines related to Medicare and/or Medi-Cal

### **WORK ENVIRONMENT**

- Ability to sit in front of and operate a video display terminal for extended periods of time
- Ability to bend, lift and carry objects of varying size weighing up to 10 pounds
- Ability to work effectively in a remote work environment
- Ability to travel to different locations in the course of work

This position description, and all content, is representative only and not exhaustive of the tasks that an employee may be required to perform. Employees are additionally held responsible to the Employee Handbook, the Alliance Standard Knowledge, Skills and Abilities and the Alliance Code of Conduct. The Alliance reserves the right to revise this position description at any time.