Data Scientist, GS-11
Location: Phoenix, AZ

This role works under close supervision and works in a developmental capacity performing assignments and completing training, both of which are aimed at preparing the incumbent for the knowledge and skills necessary to perform the duties outlined in the below job description. The incumbent receives progressively more responsible assignments as experience and training are received to higher levels. Incumbent may be promoted pending time in grade requirements and demonstrated ability to perform higher-level duties.

MAJOR DUTIES:

The incumbent serves as an expert in the Data Science Directorate, and performs as a Data Scientist with mastery data knowledge, responsible for researching and modeling the most complex problems, discovering insights and identifying opportunities through the use of statistical, algorithmic, mining and visualization techniques. Incumbent integrates and prepares large, varied datasets, creates specialized database and computing environments, and communicates results. The incumbent works closely with data stewards, project/program managers, and other IT teams to turn data from sensors into critical information and knowledge that can be used to make sound organizational decisions.

Serves as a Data Scientist for challenging and complex projects, and serve as a team participant or an independent analyst, with responsibility for conducting a wide variety of broad unclassified and classified up to and including TS/SCI (all caveats) analyses within the tactical and strategic Information Technology Environment (ITE). Applies the rigors of the data science discipline to data analysis in Cyber, Information Technology and economic analyses of complex and potentially controversial Department of Defense (DoD) and Department of the Army (DA) major information technology systems and networks to ensure that justification from the command's planning and decision processes are accurately translated into reliable and defensible inputs to the Army's Planning, Programming, Budgeting, and Execution System (PPBES), for example, the Training Resource Model (TRM). Incumbent works on a professional data science team. Requires routine and recurring access to Top Secret Sensitive Compartmented Information (SCI) materials, equipment, facilities and programs.

1. Serves as an expert interdisciplinary analyst, responsible for advanced level data science analytics characterized as highly unstructured and complex, having little definition or clarity, and especially complex analytic projects assigned to the organization (e.g. future or projected major information technology systems and networks designated by DoD). Performs on a multi-discipline data science team using diverse analytical approaches to include the involvement of two or more functional areas within math, computational and analytical disciplines. Assignments include a wide range of unique or unusual data analytical activities entailing data cleaning, data visualization, trend analysis, scripting or algorithm development, to provide descriptive, predictive as well as develop new prescriptive analytics. Incumbent must be able to respond to questions and issues involving multiple disciplines such as network system,

big data platform, and security to evaluate network performance, control, and resilience. Presents conclusions and alternate solutions to senior management, and makes recommendations on matters pertaining to current analytics and future concepts for solutions in NETCOM's mission space.

2. As an expert analyst, plans, develops, selects, creates/adapts and applies research techniques and science-based analytical processes, methods, and tools to provide comprehensive analysis, review, planning staff support, coordination, research, evaluation, document preparation, and briefings to inform decision making by the DSD leadership team and other senior leaders across the Command, and to support the Commander's and leadership team's efforts to provide for a resilient network. Assignments involve state-of-the-art analytics which require the use of new and previously untried methods and designs in order to solve the most complex multi-disciplinary system analytics. Primary focus of efforts is on information systems to support the Army's Network. These systems entail Command and Control, Command Centers, Automation, Switching (circuit and packet), Communications, Networks (LAN and WAN), and network/system remote management.

3. Provides business metrics and support for the most complex projects to identify improvements (contribution to the improvement should be monitored initially and over multiple iterations). Proposes new concepts, criteria, and practices, which define the validity of the data, how long data is reliable or meaningful, and how data is interrelated with other data. Provides on-going tracking and monitoring of performance of decision systems and statistical models. Leads the design and deployment of enhancements and fixes to systems as needed. Provides expert advice to managers and co-workers, and educates customers and users from both the IT and the business perspectives on new approaches, such as proposing and testing new hypotheses and statistical validation of results. Helps the organization understand the principles and the math behind the process to drive organizational buy-in.

4. Coordinates with the data steward to ensure that the information used is in compliance with the regulatory and security policies in place. Qualifies where information can be stored or what information, external to the organization, may be used in support of the use case. Identifies data that is available and relevant, including internal and external data sources, leveraging new data collection processes such as network sensors, smart meters and geo-location information. Collaborates with subject matter experts to select the relevant sources of information. Makes strategic recommendations on data collection, integration and retention requirements incorporating business requirements and knowledge of best practices. Develops usage and access control policies and systems in collaboration with the data steward. Partners with the data stewards in continuous improvement processes impacting data quality in the context of the specific use case. Recommends ongoing improvements to methods and algorithms that lead to findings, including new information.

Performs other duties as assigned.

Salary Range: $68,858 - $89,511 annually