

UNITED STATES OFFICE OF PERSONNEL MANAGEMENT Washington, DC 20415

Thursday, June 27, 2019

MEMORANDUM FOR: HUMAN RESOURCES DIRECTORS

FROM: MARK D. REINHOLD

ASSOCIATE DIRECTOR EMPLOYEE SERVICES

Subject: Data Scientist Titling Guidance

The U.S. Office of Personnel Management (OPM) is working in collaboration with the Office of Management and Budget and the Chief Information Officer (CIO) Council to explore data scientist work in the Federal Government. This effort supports the Foundation for Evidence – Based Policymaking Act of 2018 and the President's Management Agenda by informing agency efforts to acquire top talent to efficiently and effectively achieve the Federal Government's mission. It further supports the establishment of the role of Chief Data Officers and supporting staff in Federal agencies (Foundations for Evidence – Based Policymaking Act, §3520).

Data Scientist work is multifaceted and requires talent from interdisciplinary backgrounds. Data Scientists are defined as practitioners with sufficient knowledge in the areas of business needs, domain knowledge, analytical skills, and software and systems engineering to manage the end-to-end data processes in the data life cycle*. As OPM explores the tenets of data science work, the purpose of this memo is to provide titling guidance to agency Human Resources Offices for use in classifying data science positions within your agencies.

Data science is a rapidly changing field and positions may be classified in a number of different occupational series based on the nature of the work. Data scientist work involves overlapping skills including data analysis, analytical applications, big data engineering, algorithms, domain expertise (e.g., data cleansing, data management, analytics, visualization and engineering), statistics and machine learning**. Data Scientist use expertise in one of more of these domains to solve complex data problems.

OPM has determined that data science work may be found in various occupational series, including but not limited to, the Epidemiology - Medical and Health Care Series (0601); Actuarial Science Series (1510); Operations Research Series (1515); Statistician Series (1530), and IT Specialist - Data Management (2210). The occupational series in which data scientist work is performed is determined by the domain expertise required to conduct data scientist activities.

Within 5 U.S.C., Chapter 51 prescribes titling policy and guidance for agency use. The requirement to use official titles, however, does not preclude agencies from using any unofficial title they choose for positions. Unofficial titles (such as those relating to specific agency organizations or programs) are appropriate and may be helpful for internal agency use or for recruiting purposes, but are not always descriptive of the overall occupation for Governmentwide purposes (p. 14)***.

Agency Action

Therefore, this guidance authorizes agencies to use a parenthetical of (Data Scientist) along with the occupational title for positions that perform data science work as a major portion of the job, and not as a collateral duty, for example Statistician (Data Scientist). Parenthetical titles indicate special knowledge and skills needed to perform the work of a position and must be based on the evaluation of work (p. 15)****. OPM will take an evidence based approach to determine if additional flexibilities are needed. OPM encourages Human Resources Offices to collaborate with your CIO organizations and Data Scientist Managers on job design and titling of data scientist positions.

If you have any questions, please feel free to contact April Davis, Director of Classification and Assessment Policy, at fedclass@opm.gov or (202) 606-3600 with questions related to job design and titling your agency's data scientist positions.

Cc: Chief Human Capital Council Officers (CHCOs), Deputy CHCOs, CIO Council Members, Office of Management and Budget, Office of Science and Technology Policy

^{*} NIST Interoperability Framework: Volume 1, Definitions. (2015, Sept. 16). NIST Special Publication 1500-1. Retrieved from http://bigdatawg.nist.gov/ uploadfiles/NIST.SP.1500-1.pdf

^{**} NIST Interoperability Framework: Volume 1, Definitions. (2015, Sept. 16). NIST Special Publication 1500-1. Retrieved from http://bigdatawg.nist.gov/ uploadfiles/NIST.SP.1500-1.pdf

^{***} U.S. Office of Personnel Management. (2009). Introduction to the Position Classification Standards. Retrieved from https://www.opm.gov/policy-data-oversight/classification-qualifications/classifying-general-schedule-positions/positionclassificationintro.pdf

^{****} U.S. Office of Personnel Management. (2009). Introduction to the Position Classification Standards. Retrieved from https://www.opm.gov/policy-data-oversight/classification-qualifications/classifying-general-schedule-positions/positionclassificationintro.pdf