



**Title 21 Vacancy Announcement**  
**Department of Health and Human Services (HHS)**  
**Food and Drug Administration (FDA)**  
**Center for Devices and Radiological Health (CDRH)**  
**Office of Strategic Partnerships and Technology Innovation (OST)**  
**Immediate Office (IO)**

**Application Period:** February 15, 2024 – March 14, 2024

**Area of Consideration:** United States Citizenship is required. You must be a U.S. Citizen or U.S. National. Foreign nationals or legal permanent residents are not eligible for consideration.

**Position:** Data Engineer (Data Scientist)

**Series:** 0301

**Location(s):** Remote Eligible

**Salary:** Salary is commensurate with Education and experience and starts at \$139,395.00

**Work Schedule:** Full-Time

**Cures Band(s):** Band D

**Full Performance Band Level:** Band D

**Travel Requirements:** This position requires less than 25% of travel

**Supervisory:** No

**Bargaining Unit:** 8888

**This position is being filled under a stream-lined hiring authority, Title 21, Section 3072 of the 21st Century Cures Act. The candidate selected for this position will serve under a career or career-conditional appointment and be paid under the provisions of this authority.**

**Additional information on 21st Century Cures Act can be found here:**

[\*\*21st Century Cures Act Information\*\*](#)

## Introduction

The Food and Drug Administration (FDA or Agency) is the regulatory, scientific, public health and consumer protection agency responsible for ensuring all human and animal drugs, medical devices, cosmetics, foods, food additives, drugs and medicated feeds for food producing animals, tobacco and radiation emitting devices safe, and effective.

The mission of the Center for Devices and Radiological Health ([CDRH or Center](#)) is to protect and promote the public health by performing essential public health tasks by making sure that

medical devices and radiological health products are safe for people in the United States. The [Office of Strategic Partnerships and Technology Innovation | FDA](#) (OST) provides leadership for all scientific collaborative and emerging technology related activities at CDRH. We represent CDRH with a broad and diverse array of national and international entities including other government agencies, Congress, industry, academia, consumer and patient organizations, and healthcare professional organizations, with mutual interests in medical devices and radiation-emitting products.

## Duties/Responsibilities

The Data Scientist serves as a Data Engineer responsible for designing, developing, and maintaining the infrastructure and systems required for data storage, processing, and analysis for all of CDRH. They play a crucial role in the building, organizing and management of the data pipelines that enable efficient and reliable data integration, transformation, quality, and delivery for all data users. The incumbent will be the technical authority in the management of the data across the Center.

The incumbent designs and develops data pipelines that extract data from various sources and transforms those data into the desired formats to then be loaded into the appropriate data storage systems. This individual will collaborate with data scientists, analysts, and business users to understand data use and requirements. Works with technical resources to optimize data models and algorithms for data quality, security, and governance. They will also provide guidance and recommendations to leadership regarding the best solutions regarding these factors.

The incumbent will integrate data from various sources, including databases, data API's and other external sources. Ensure data consistency and integrity during the integration and ingestion processes, executing data validation and cleansing as necessary. This will be accomplished by transforming raw data into a usable format and applying data cleansing, aggregation, filtering, augmentation, and enrichment techniques.

The incumbent will also optimize data pipelines and data processing workflows to ensure optimal performance, scalability, and efficiency. Similarly, will implement data quality checks and validations within the data pipelines to ensure the accuracy, consistency, and completeness of the data. Responsible for designing, automating, and supporting sophisticated data extraction, transformation, and loading (ETL) applications, and creating data flow models to support these efforts. Create and maintain data mapping documentation and mapping artifacts as well as establishing standard practices and procedures for ETL development and implementation.

The incumbent will interact with Business Stakeholders across the Center, the Business Data Architect, and the Data Manager to develop mapping specification documentation and ascertain the validity of the information. Responsible for translating non-technical concepts into a technical data infrastructure, as well as will make critical decisions as part of this role in order

to provide understandable information to leadership and the Center at large.

## Qualifications

To be placed into a Cures position, candidates must meet the following criteria:

1. Scientific, Technical, and Professional Fields
2. Qualified and Outstanding Candidates
  - a. **Qualified** applies to all candidates for Cures appointments. The FDA OTS will use the basic requirements defined in the [OPM Qualification Standards](#) as a baseline for comparing experience levels and other candidate attributes for relevant positions.
  - b. **Outstanding** candidates can be defined by existing outstanding work experience, outstanding performance rating, or both.

In order to qualify for this Title 21 Cures position, the candidate(s) must meet the following **required** qualifications. *Please note: Additional education and experience listed that is not indicated as **required** is preferable and desired. Candidates who do not meet the “desired” criteria will **not** be excluded from consideration for this position.*

**Education:** A bachelor’s degree or higher in mathematics, statistics, computer science, informatics, data science, engineering, operations research, bioinformatics, economics, public health, computational biology, physics, or related scientific or technical field. The degree must be from an accredited program or institution.

OR

**Experience:** Relevant work in or demonstrated understanding in data science or a related field (through portfolios, certifications, etc.).

### **Position’s Desired Skills and Experience:**

- Expert knowledge of ETL tools such as Pentaho, AWS Glue and other data technologies.
- Ability to design, build, and deploy data solutions that capture, explore, transform, and utilize data to support Artificial Intelligence, Machine Learning and Business Intelligence.
- Strong ability in ETL programming languages such as Java, Python, and SQL.
- Ability in data science languages/tools such as SQL, R, or SAS.
- Proficiency in the design and implementation of modern data architectures and concepts such as cloud services (AWS, Azure, GCP) and modern data warehouse tools (Snowflake, Databricks).
- Experience with database technologies such as SQL, NoSQL, or Oracle.
- Ability to collaborate within and across teams of different technical knowledge to support delivery and educate end users on data products.

- Expert problem-solving skills, including debugging skills, allowing the determination of sources of issues in unfamiliar code or systems, and the ability to recognize and solve repetitive problems.
- Strong business acumen and interpersonal skills; able to work across business lines at a senior level to influence and effect change to achieve common goals.
- Ability to describe business use cases/outcomes, data sources and management concepts, and data translation and quality approaches/options.
- Ability to translate among the languages used by executive, business, IT, and analytic stakeholders.
- Strong analytic and problem-solving skills
- Able to communicate across all levels of the organization and work with diverse projects and teams.
- Strong knowledge of data management, integration, and expert database development techniques.
- Ability and desire to regularly learn and adopt new technologies and methodologies into their work.
- Extensive experience with various database technologies.
- A bachelor's degree in computer science, data science, software engineering, related field, or job-related experience.
- At least six years' experience in data engineering disciplines, including data integration, modeling, optimization and data quality or other areas directly relevant to these responsibilities and tasks.

## How to Apply

Submit resume or curriculum vitae, transcripts with cover letter by **March 14, 2024**, to [CDRHRecruitment@fda.hhs.gov](mailto:CDRHRecruitment@fda.hhs.gov). **Compile all applicant documents into one (1) combined document (i.e., Adobe PDF)**. Candidate resumes may be shared with hiring official within the CDRH with a similar job vacancy. Candidates can opt out of this process by annotating resume with "do not share". Please include the following Job Reference ID in the subject line of your email submission: **CDRH/OST/IO Data Scientist PBM-4061**

PHS Commissioned Corps Officers interested in performing the duties of this position within the Commissioned Corps may apply to this announcement. Officers must follow the instructions for how to apply and include their most recent orders in addition to the required documents. If selected, candidates will be referred to (CC) personnel and not as candidates for a Cures appointment.

## Educational Transcripts

**SUBMITTING YOUR TRANSCRIPTS:** Positions which are scientific or technical in nature often have very specific educational requirements. A transcript is required to verify educational achievement. Pay careful attention to the Qualifications and Education sections to identify vacancies where a transcript is required. Even if you hold a similar position or are a current FDA employee, you are not exempt from transcript requirements.

FOREIGN EDUCATION: If you are using education completed in foreign colleges or universities to meet the qualification requirements, you must show that the education credentials have been evaluated by a private organization that specializes in interpretation of foreign education programs and such education has been deemed equivalent to that gained in an accredited U.S. education program; or full credit has been given for the courses at a U.S. accredited college or university. For more information about this requirement, please visit the [U.S. Department of Education website for Foreign Education Evaluation](#).

## Conditions of Employment

- U.S. Citizenship requirement or proof of being a U.S. National must be met by closing date.
- Employment is subject to the successful completion of a background investigation, verification of qualifications, completion of onboarding forms, submission of required documents, and any other job-related requirement before or after appointment.
- Applicants must meet all qualification requirements by the closing date of this announcement.
- Direct Deposit: You will be required to have all federal salary payments electronically deposited into a bank account with a financial institution of your choice.
- FDA participates in e-Verify: All new hires must complete the I-9 form; this information will be processed through e-Verify to determine your employment eligibility. If a discrepancy arises, you must take affirmative steps to resolve the matter.
- Males born after December 31, 1959, must be registered with the Selective Service.
- Financial Disclosure may be required.
- Ethics Clearance may be required.
- Background Investigation/Security Clearance is required. All employees must pass a security investigation. Failing to pass the background check may be grounds for removal or legal action. If hired, you may be subject to additional investigations at a later time.

## Security Clearance Requirements

Background Investigation/Security Clearance Requirements: This position requires a *Public Trust* security clearance.

## Ethics Clearance Requirements

This position may require financial disclosure reporting and will be subject to FDA's prohibited financial interest regulation. If you are hired, you may be required to divest of certain financial interests. You are advised to seek additional information on this requirement from the hiring official before accepting any job offers. For more information, please visit the FDA Ethics web page: <https://www.fda.gov/about-fda/jobs-and-training-fda/ethics>.

## Equal Employment Opportunity

### Equal Employment Opportunity Policy

The United States Government does not discriminate in employment on the basis of race, color, religion, sex (including pregnancy and gender identity), national origin, political affiliation, sexual orientation, marital status, disability, genetic information, age, membership in an employee organization, retaliation, parental status, military service, or other non-merit factor.

[Equal Employment Opportunity \(EEO\) for federal employees & job applicants](#)

## Reasonable Accommodation

### Reasonable Accommodation Policy

Federal agencies must provide reasonable accommodation to applicants with disabilities where appropriate. Applicants requiring reasonable accommodation for any part of the application process should follow the instructions in the job opportunity announcement. For any part of the remaining hiring process, applicants should contact the hiring agency directly.

Determinations on requests for reasonable accommodation will be made on a case-by-case basis. A reasonable accommodation is any change to a job, the work environment, or the way things are usually done that enables an individual with a disability to apply for a job, perform job duties or receive equal access to job benefits. Under the Rehabilitation Act of 1973, federal agencies must provide reasonable accommodations when: An applicant with a disability needs an accommodation to have an equal opportunity to apply for a job. An employee with a disability needs an accommodation to perform the essential job duties or to gain access to the workplace. An employee with a disability needs an accommodation to receive equal access to benefits, such as details, training, and office-sponsored events. You can request a reasonable accommodation at any time during the application or hiring process or while on the job.

Requests are considered on a case-by-case basis. Learn more about [disability employment and reasonable accommodations](#) or [how to contact an agency](#).

## E-Verify

The Food and Drug Administration participates in the USCIS Electronic Employment Eligibility Verification Program (E-Verify). E-Verify helps employers determine employment eligibility of new hires and the validity of their Social Security numbers.

## Announcement Contact

For questions regarding this Cures position, please contact [CDRHRecruitment@fda.hhs.gov](mailto:CDRHRecruitment@fda.hhs.gov).

The Department of Health and Human Services is an equal opportunity employer with a smoke free environment.

*FDA is an equal opportunity employer.*

