

# Senior Data Science Engineer

Job ID  
REQ-10017946  
Aug 22, 2024  
USA

## Summary

Location: Hybrid. Cambridge, MA.

### About the role:

Oncology Data Science (OncDS) Biomedical Research is at the forefront of oncology research - and includes the Next-Gen Diagnostics (NGDx) team - which focuses on bioinformatics pipelines for established and experimental assays such as RNA-seq, ctDNA, single-cell / CITE-seq, spatial transcriptomics, imaging data and flow cytometry. The role of Senior Data Science / Engineer is directly involved in the development and maintenance of the LIMS, pipeline, and assays - with the goal of producing high-quality, analyzable datasets - both reported to the clinical trial teams and used for additional research (bed-to-bench / back-translation) activities to answer our key scientific questions. Oncology Data Science offers opportunities to grow in-terms of working with real-world data as well as large research datasets - both public and private.

## About the Role

### Key Responsibilities:

- Design, development, maintenance, and support of the NGDx LIMS, pipeline framework, pipelines and assays, including Quality Control (QC) - current codebase is a combination of Java, Python, and R
- Work with various partners from lab associates to clinical trial data management in the development of assays to support our trials and additional research
- Implementing robust tooling for the development of new assays and the integration of new data types from CROs and collaborations
- Maintaining consistent support for data generation and ingestion / QC activities
- Enabling analysts to concentrate on subject matter expertise and analytics crucial for new assay development, as well as facilitating effective communication with clinical teams for data interpretation support
- Become a subject matter expert in our various Novartis data science platforms / tooling in order to support other OncDS analysts
- Coordinate, as needed, with Novartis IT as a bridge with Oncology leveraging your engineering expertise

Novartis Compensation and Benefit Summary: The pay range for this position at commencement of employment is expected to be between \$144,000 - \$216,000 / year. While salary ranges are effective from 1/1/24 through 12/31/24, fluctuations in the job market may necessitate adjustments to pay ranges during this period. Further, final pay determinations will depend on various factors, including, but not limited to geographical location, experience level, knowledge, skills, and abilities. The total compensation package for this position may also include other elements, including a sign-on bonus, restricted stock units, and discretionary awards in addition to a full range of medical, financial, and/or other benefits (including 401(k) eligibility and various paid time off benefits, such as vacation, sick time, and parental leave), dependent on the position offered. Details of participation in these benefit plans will be provided if an employee receives an offer of employment. If hired, employee will be in an "at-will position" and the Company reserves the right to modify base salary (as well as any other discretionary payment or compensation program) at any time, including for reasons related to individual performance, Company or individual department/team performance, and market factors.

### Novartis EVP Manifesto.mp4

### Essential Requirements:

- This position will be located at the Cambridge, MA site and will not have the ability to be located remotely. This position will not require travel.
- Master's in bioinformatics, computer science or a related field, with a minimum of 5 years' experience (or 10 years without Masters)
- Experience in developing, implementing and delivering data products, data strategies, data governance frameworks, and data quality standards, relevant to clinical applications
- Experience in working with diverse and large-scale clinical data sources, such as clinical trials, real-world data, genomics, imaging, and digital health
- Demonstrated ability in establishing effective collaborative relationships with cross functional technical teams
- Strong communication skills and ability to represent the group to Novartis IT and Biomedical Research
- Demonstrated organizational skills, aligning available resources to meet key goals

### Desirable Requirements:

- Bioinformatics / Genomics knowledge
- Data pipeline development and testing
- Data engineering (storage, formats, transformation, modeling, quality, security, visualization)
- Biomedical Ontologies / CDISC knowledge
- High-Performance Cluster (HPC) experience
- Python and R (Programming Language) at senior-level
- Unix shell scripting at senior-level

Benefits and rewards: Read our handbook to learn about all the ways we'll help you thrive personally and professionally: <https://www.novartis.com/careers/benefits-rewards>

Commitment to Diversity and Inclusion:

Novartis is committed to building an outstanding, inclusive work environment and diverse teams' representative of the patients and communities we serve.

**Why Novartis:** Helping people with disease and their families takes more than innovative science. It takes a community of smart, passionate people like you. Collaborating, supporting and inspiring each other. Combining to achieve breakthroughs that change patients' lives. Ready to create a brighter future together?

<https://www.novartis.com/about/strategy/people-and-culture>

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**Benefits and Rewards:** Read our handbook to learn about all the ways we'll help you thrive personally and professionally: <https://www.novartis.com/careers/benefits-rewards>

