

Senior Data Scientist

Job ID

REQ-10044721

May 19, 2025

India

Summary

To provide data science and quantitative analytical support for PS&PV by ensuring timely delivery of high-quality reports to meet regulatory requirements, enable medical safety analysis and monitor safety profile of Novartis products. Build capabilities to leverage the Science of data to enhance safety surveillance, case management and delivery of management metrics. These tasks are to be performed independently.

Responsible for independently managing small to medium Projects.

About the Role

Major Accountabilities:

■ Engineer key analytical insights into simple, intuitive, and well-designed tools and services tailored for each role and process in areas such as:

- aggregate analysis and reports including PSUR, DSUR, PQR, APR and audit/inspection related outputs
- PV leaning analytics
- budget forecasting
- resource allocation and vendor management support
- patient focused protocol design and reported outcome.
- risk-based operational monitoring of country operations
- detecting data anomalies, outliers and procedural errors
- signal detection
- track the business's performance against data analysis model and monitor trends in key business KPIs, providing valuable insights to relevant departments for overall business performance improvement.
- Provide solutions for a variety of business applications including but not limited to:
 - Customer Segmentation & Targeting, Event Prediction, Propensity Modelling, Churn Modelling, Customer Lifetime Value Estimation, Forecasting, Recommender Systems, Modelling Response, Optimization
 - Collaborates with globally dispersed internal stakeholders and cross-functional teams to solve critical business problems, drive operational efficiencies, and deliver successfully on high visibility strategic initiatives.
 - Interact with domain experts to understand the data and the business challenges and design solutions to the challenges using data.
 - Ability to translate business questions into analytical problems and build solutions using visualization techniques, machine learning, statistical modeling.
 - Independently manage small to medium projects.

- Ability to provide understandable and actionable business intelligence for key stakeholders.
- Research and develop new algorithms, methods, statistical models and business models and providing insight into structured and unstructured data.
- Working with the internal process experts and key stakeholders in providing analysis and interpretation of safety/PV data.
- Is responsible in creation of new data sciences capabilities for the business by envisioning and executing strategies that will influence improvement of the business's performance by enabling informed decision making.
- Collaborate with partners in IT and Development functions to improve the availability of data (near-real time data flows) and data quality as required for high quality, innovative, analytical/ technical solutions.
- Bring in efficiency with innovative solutions; effective usage of new technologies and concepts; developing new analysis opportunities by integrating existing and new data sources.
- Continuously monitor external environment to ensure that the organisation can leverage key developments in data science and AI.
- Lead the design and oversees the development of predictive and data-driven solutions (for ex: SafetyReporting tool) and services to ensure drug, device, trial and patient level benefit/risk information is available proactively for safety analysis, signal detection and risk management.
- Manage timely delivery of high quality PV& Medical safety listing, analysis and data and ensure compliance with health authority regulations.
- Supports and represents Data Science team in regulatory inspections/audits, as and when required.
- Should mentor and coach data science leads, by guiding them through the execution of their duties, and encouraging their professional growth in preparation for their occupation of his position in future.
- Act as deputy of Sr. Manager Data Science and AI/Head Data Science/Head Data Analytics as and when needed.

Minimum requirements :

- Masters/Bachelor's Degree in Data Science, Statistics, Mathematics, Operations Research, Engineering (Biotech, Computer Science, Information Technology), Pharmaceutical, Life Science or similar field. MBA/PhD from reputed institutes can also apply.
- 10-15 years of experience in Data Science related fields with specific experience of producing Key Performance Indicators or similar monthly reports for Senior Management and building statistical models for addressing business issues
- 1-3 years of Pharma, CRO, Life Science experience would be preferred.
- Hands on technical expertise in at least 1 of : Machine Learning, Deep Learning, Text Mining and Natural Language Processing, Time Series, Image processing, Neural Networks.
- Ability to work independently to be able to design, develop code and manage algorithms / Machine Learning models in Python/R/Java
- Advance level skills in Python/ R is a must, and working knowledge in SQL - ability to write and understand queries and extract complex datasets and produce reports from Databases (including Oracle, SAS, non-relational databases)
- Pharmacovigilance/Clinical operations domain expertise.
- Ability to translate technical concepts for non-technical users in the areas of clinical databases (both internal and external).
- Extensive experience in working with large-scale datasets (in big data architecture, data lake, data mart, data warehouse) and be able to preprocess the data as per the requirement.
- Ability to work in teams, manage and coordinate projects, under pressure, demonstrating initiative and

flexibility through effective and innovative technical ability.

- Interpersonal and communication skills, and ability to operate effectively in a matrix environment
- Attention to detail, quality, time management and customer focus

Join our Novartis Network: If this role is not suitable to your experience or career goals but you wish to stay connected to hear more about Novartis and our career opportunities, join the Novartis Network here:

<https://talentnetwork.novartis.com/network>

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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<https://talentnetwork.novartis.com/network>

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>

Division

Development

Business Unit

Innovative Medicines

Location

India

Site

Hyderabad (Office)

Company / Legal Entity

IN10 (FCRS = IN010) Novartis Healthcare Private Limited

Functional Area

Data and Digital

Job Type

Full time

Employment Type

Regular

Shift Work

No

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Novartis is committed to working with and providing reasonable accommodation to individuals with disabilities.

If, because of a medical condition or disability, you need a reasonable accommodation for any part of the recruitment process, or in order to perform the essential functions of a position, please send an e-mail to diversityandincl.india@novartis.com and let us know the nature of your request and your contact information.

Please include the job requisition number in your message.

Novartis is committed to building an outstanding, inclusive work environment and diverse teams'

representative of the patients and communities we serve.

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