

Associate Director. Analytics & AI

Job ID
REQ-10033765
Dec 12, 2024
Switzerland

Summary

The role is part of the commercial Data and Analytics team at Novartis, focusing on understanding complex business problems from various stakeholders and business functions. It involves formulating integrated analytical approaches to mine data sources, employing statistical methods, machine learning algorithms, and AI to discover actionable insights and automate processes, thereby reducing effort and time for repeated use.

About the Role

Major accountabilities:

- Experience of manipulating and analyzing large high dimensionality unstructured datasets, drawing conclusions, defining recommended actions, and reporting results with a proven ability in the modelling of sophisticated datasets in applied business application domains
- Ability to work and communicate with senior stakeholders across Novartis teams and proven track record to drive strategic priorities at enterprise level in a matrix environment
- Ability to translate business requirements to problem statements and drive hypothesis generation to identify right data science problems to be solved
- Ability to deliver enterprise level scalable solutions along with proven capability in building and developing data science driven software products and understanding of software lifecycle management and agile product delivery

Essential Requirements:

- Demonstrated experience with modern data science approaches, including unsupervised and supervised classification and regression algorithms such as k-means clustering, support vector machines, random forests, neural networks, and deep learning.
- Advanced knowledge and proven experience with standard data science languages: Python, Databricks, and Snowflake, along with familiarity with database systems (e.g., SQL, NoSQL, graph).
- Comfortable with version controlling (git etc.) and ML lifecycle management tools (MLflow), with knowledge of Kedro preferred.
- Understanding of statistics, econometrics, ML algorithms (random forest, GBM, clustering techniques, etc.), and basic understanding of optimization.
- Proficient in building Deep Learning pipelines (familiar with LSTM, Temporal CNN, and other DL-based time series techniques).
- Understanding of advanced optimization techniques - Particle Swarm, Bayesian Optimization, etc..
- Advanced knowledge of multi-cloud environments such as AWS, MS Azure, Databricks, along with understanding and familiarity with software development principles.
- Extensive experience in developing and scaling data science products at the enterprise level and agile

product development methodologies.

- Understanding of algorithm design, development, optimization, scaling, and applications with an ability to create reusable data science assets as a service.
- Good understanding of at least one business area where data science is applied.
- Masters (or Bachelors from a top-tier university) in a quantitative discipline (e.g., Applied Mathematics, Computer Science, Bioinformatics, Epidemiology, Statistics, Decision Science, Quantitative Research, Econometrics, Computational Physics/Chemistry/Biology).
- Minimum 5 years of relevant experience in Data Science, with at least 3 years in Pharma/Healthcare. Cross-industry experience is highly preferred. Minimum 2 years of international experience working with global teams.

Desirable Requirements:

- Experience of manipulating and analyzing large high-dimensionality unstructured datasets, drawing conclusions, defining recommended actions, and reporting results.
- Ability to work and communicate with senior stakeholders across teams and a proven track record of driving strategic priorities at the enterprise level in a matrix environment.
- Ability to translate business requirements to problem statements and drive hypothesis generation to identify the right data science problems to be solved.
- Ability to deliver enterprise-level scalable solutions along with proven capability in building and developing data science-driven software products and understanding of software lifecycle management and agile product delivery.

Location:

This role can be based in Basel, Switzerland. Novartis is unable to offer relocation support for this role: please only apply if this location is accessible for you.

Benefits:

Read our handbook to learn about all the ways we'll help you thrive personally and professionally: [Novartis Life Handbook](#)

Commitment to Diversity & Inclusion:

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

Accessibility and accommodation:

Novartis is committed to working with and providing reasonable accommodation to all individuals. If, because of a medical condition or disability, you need a reasonable accommodation for any part of the recruitment process, or in order to receive more detailed information about the essential functions of a position, please send an e-mail to inclusion.switzerland@novartis.com and let us know the nature of your request and your contact information. Please include the job requisition number in your message.

Why Novartis?

Our purpose is to reimagine medicine to improve and extend people's lives and our vision is to become the most valued and trusted medicines company in the world. How can we achieve this? With our people. It is our associates that drive us each day to reach our ambitions. Be a part of this mission and join us! Learn more here: <https://www.novartis.com/about/strategy/people-and-culture>

Join our Novartis Network: *If this role is not suitable to your experience or career goals but you wish to stay connected to learn 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?

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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

International

Business Unit

Innovative Medicines

Location

Switzerland

Site

Basel (City)

Company / Legal Entity

C028 (FCRS = CH028) Novartis Pharma AG

Functional Area

Data and Digital

Job Type

Full time

Employment Type

Regular

Shift Work

No

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