NOVARTIS

Senior Expert Data Scientist for Cardiovascular, Renal and Metabolism (CRM)

Job ID
REQ-10050655

5   07, 2025

USA

Do you love data and tech? Are you excited about AI? Are you a team-player who inspires greatness in others? Do you want to find the answer to life, the universe and everything?

Join our Data42 team!

At Novartis, we reimagine medicine by using the wealth of our internal data combined with advanced analytics. Our Data42 platform provides us access to Novartis's high-quality, multi-modal preclinical and clinical data as well as external data. It is the perfect environment to develop cutting edge AI/ML models. At Data42, we are a global team of data scientists and data engineers dedicated to uncovering novel insights and to drive drug development pipeline decisions by leveraging the Data42 platform.

Data42 is currently seeking a highly skilled individual to join our team as a Senior Data Science Expert. As an essential part of the team, you will collaborate with scientists in various disease and functional areas across the organization to advance research and drug development, specifically in

our Cardiovascular, Renal and Metabolic programs.

Together with the CRM Scientific Lead (Cardio-Renal-Metabolic), you will be part of our Data42 Data Science function. You will collaborate with Scientists, Clinicians, Data Scientists in the Cardiovascular, Renal and Metabolism disease area and with our colleagues in the AICS (AI and Computer Science) team.

About the Role

Major accountabilities:

- Leading projects and effectively communicating with stakeholders and collaborators.

- Develop cutting-edge AI models

- Actively participating in the design and development of clinical pipeline and customization of pooling trial data as needed to address important scientific questions, such as indication expansion, asset differentiations, patient subgroup identification and discovery of novel biomarkers

- Independently designing, using, and improving bioinformatics tools and models that are specifically designed for integrating different types of data, enabling the exploration of various biological layers.

- Acting as a connector between valuable data resources and project teams, enhancing the generation of hypotheses by sharing insights derived from or applied to late-stage pipeline data.

Requirements:

- Solid scientific research background, demonstrated ability to ask and answer critical questions using AI/ML

- Effective at communicating and presenting scientific ideas and results to a diverse audience, including peers, stakeholders from different fields, and non-experts

- Track record of rapidly upskilling in new subject areas to reach a high level of competence. Demonstrated a strong willingness to learn and step out of the comfort zone
- Education: PhD in a quantitative field such as Computer Science, Physics, Statistics, Data Science, mathematics or related quantitative field with proven track/record in ML/AI

Preferred Technical Skills

- Machine Learning & Data Science: Supervised and unsupervised learning (e.g., Gaussian Mixture Models, DBSCAN, Random Forest, SVM), Deep learning (CNNs, RNNs, Transformers), Feature engineering, Dimensionality reduction (PCA, t-SNE,UMAP), Anomaly

detection, A/B testing, Statistical methods for inference, prediction and hypothesis testing (e.g. linear and logistic regression, Cox proportional hazard model, methods to correct for bias), Time series analysis, Data visualization

- Programming & Tools: Python (NumPy, Pandas, Scikit-learn, TensorFlow, PyTorch), R, SQL, MATLAB, Spark, Git, Docker, good coding practices (e.g. version control, documentation), Cloud computing (AWS)

- Data Engineering: Data cleaning and preparation, SQL, model deployment and optimization, processing big data (e.g. with Spark)

- Experience with clinical data or other data types used in the life sciences (e.g. omics, pre-clinical, claims) would be a plusAbility to communicate complex analyses and findings to a diverse audience, including effective data visualization.

- Strong scientific curiosity, initiative, and learning agility.

- Ability to work as part of an interdisciplinary team, including clinicians, biologists, chemists, and data scientists.

- Strong communication skills in verbal, written, and virtual formats.
- Have prior experience with NGS and –omics data

Novartis Compensation and Benefit Summary: The pay range for this position at commencement of employment is expected to be between $119,700 and $222,300 per year; however, while salary ranges are effective from 1/1/25 through 12/31/25, 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.

You'll Receive: You can find everything you need to know about our benefits and rewards in the Novartis Life Handbook. https://www.novartis.com/careers/benefits-rewards

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

Join our Novartis Network: Not the right Novartis role for you? Sign up to our talent community to stay connected and learn about suitable career opportunities as soon as they come up: 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

EEO Statement:

The Novartis Group of Companies are Equal Opportunity Employers. We do not discriminate in recruitment, hiring, training, promotion or other employment practices for reasons of race, color, religion, sex, national origin, age, sexual orientation, gender identity or expression, marital or veteran status, disability, or any other legally protected status.

Accessibility & Reasonable Accommodations

The Novartis Group of Companies are 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 application process, or to perform the essential functions of a position, please send an e-mail to us.reasonableaccommodations@novartis.com or call +1(877)395-2339 and let us know the nature of your request and your contact information. Please include the job requisition number in your message.

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Company / Legal Entity
U175 (FCRS = US175) Novartis Institutes for BioMedical Research, Inc.

Functional Area
Data and Digital

Job Type
Full time

Employment Type
Regular

Shift Work
No

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