NOVARTIS

Human Genetics and AI Expert Data Scientist

Job ID
REQ-10054225
Jun 16, 2025
USA

Summary

We are looking for a data scientist or computational biologist with expertise in human genetics and machine learning. This role will be part of a team applying advanced deep learning methods to tackle medical challenges and improve patient outcomes. The candidate should be able to integrate, analyze, and interpret large biomedical datasets using various computational tools. We seek a motivated, creative, and collaborative individual.

About the Role

Internal Job Title: Expert I, Data Science/Expert II, Data Science

Position Location: Hybrid onsite, San Diego, CA #LI-Hybrid

About the Role:

We are looking for a data scientist or computational biologist with expertise in human genetics and machine learning. This role will be part of a team applying advanced deep learning methods to tackle medical challenges and improve patient outcomes. The candidate should be able to integrate, analyze, and interpret large biomedical datasets using various computational tools. We seek a motivated, creative, and collaborative individual.

Your responsibilities will include:

- Analyze, model, and integrate genetics and genomics data, including Genome-Wide Association Studies (GWAS), Quantitative Trait Loci (QTL), and single-cell ATAC-seq (scATAC-seq) to better understand complex diseases
- Implement and benchmark deep learning models to drive innovation in drug discovery with a focus on human genetics data
- Work with wet lab scientists to develop testable biological hypotheses and collaborate in designing rigorous preclinical experiments
- Collaborate with other data scientists and be a subject matter expert in machine learning portion of the project

What you'll bring to the role:

- Ph.D. with 0-3 years of experience (or M.S. with equivalence) in computational biology, population genetics, data science, statistics, computer science, or a related field
- Experience in human genetics research using mendelian randomization, fine-mapping, LDSC, and rare variant analysis is required

- Strong foundation in deep learning (DL) and machine learning (ML) based model evaluation techniques; familiarity with large language models (LLMs) or related NLP techniques or attention networks is encouraged
- Proficiency in python or similar programming languages with experience in ML or DL frameworks (e.g. PyTorch)
- Experience analyzing high-dimensional data sets, with a preference for experience in genetics and OMICs data (e.g. epigenetics, genomics, proteomics, or single cell transcriptomics)
- Proficient in written and spoken English
- Openness to learning new science and tolerance for diverse communication styles across discipline boundaries

The salary for this position is expected to range between:

- Expert I, Data Science: $93,800 and $174,200 per year
- Expert II, Data Science: $103,600 and $192,400 per year

The final salary offered is determined based on factors like, but not limited to, relevant skills and experience, and upon joining Novartis will be reviewed periodically. Novartis may change the published salary range based on company and market factors.

Your compensation will include a performance-based cash incentive and, depending on the level of the role, eligibility to be considered for annual equity awards.

US-based eligible employees will receive a comprehensive benefits package that includes health, life and disability benefits, a 401(k) with company contribution and match, and a variety of other benefits. In addition, employees are eligible for a generous time off package including vacation, personal days, holidays and other leaves.

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

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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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Human Genetics and AI Expert Data Scientist

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