



Job specification

Data Scientist and Machine Learning Engineer Innovation Lab

Employment status: Permanent

Reporting to: Innovation Analyst

Location: Johannesburg

About Healthbridge

As Healthbridge we exist to liberate life through transforming healthcare. We creatively look for ways to make healthcare more affordable, accessible and effective for everyone. Our innovative HealthTech solutions ensure that patients, healthcare providers and other role players in the healthcare ecosystem benefit by collaborating together.

We seek high performers with a positive, growth mindset who will thrive in a culture based on strong values, accountability, openness, collaboration and no politics.

About the team

The Innovation Lab is a new division of Healthbridge dedicated to transforming healthcare through innovation. The Lab is led by Healthbridge founder Gerrie van Zyl and is made up of a team of individuals from different backgrounds, including strategy consulting, entrepreneurship, data analytics and machine learning, and project management.

The Lab's mission is to re-envision healthcare by conceptualising, testing, and incubating transformative innovations. To do this, the Lab leverages the domain knowledge, linkages, and data of the Healthbridge business in a "lean" innovation process. This allows the Lab to quickly design, test, and launch innovations that can have a real impact on the healthcare industry.

The Lab collaborates with project teams within Healthbridge and across our strategic partners to co-create innovative solutions to current and future challenges facing our industry. The Lab team ensures a consistent approach to managing projects based on the "Invincible Company" framework and provides a permanent focus on driving innovation within the business.

In addition to managing and guiding the overall innovation process, the Lab team contributes directly to the development and refinement of the project ideas. We are a team of smart, motivated individuals passionate about improving healthcare and growing the capabilities of all innovators within Healthbridge.



About growth

Growth opportunities at Healthbridge are wide and varied, with excellent growth opportunities within the role itself to become a specialist. We are a dynamic and growing company that rewards great performance with not only the standard progression (take-my-boss'-job) path, but also offers exciting opportunities to those wishing to expand their horizons.

About the job

Healthbridge sees the rapid advances in generative AI and machine learning as creating a big opportunity to reinvent healthcare. The purpose of this role is central to this strategy and it is to support Innovation Lab projects with data analytics and machine learning skills to support our new product exploration process.

Role purpose

- Collaborating with cross-functional teams to identify and define data-driven solutions to healthcare problems which have the potential to transform healthcare
- Out-of-the-box thinking to use information to create new value-adding products
- Cleverly extracting meaningful insights from our large lakes of data
- Proving or disproving product hypotheses hypotheses by analysing data and relationships between data
- Engineering foundational LLM prompts to enable these models to achieve business goals
- Developing custom machine learning models to enhance existing products and/or enable the development of entirely new products.

If you are a **curious, creative and innovative** person who strives to provide measurable value in an industry where you can make a real difference then Healthbridge, in the Innovation Lab, is where you'll have that opportunity.

Description

In this role, you will be a core member of the Innovation Lab team working on all projects that would benefit from your experience and competence. You will work alongside the Healthbridge founder and Chief Entrepreneur and the Innovation Lab Director as you work on projects with other smart people from different business lines with deep healthcare expertise.

Through stimulating and challenging data analytics tasks, under the guidance of the Chief Entrepreneur and the Innovation Lab Director you will rapidly ramp up your data analytic skills and become an expert in Python (the language of data science) and machine learning.



Key responsibilities include:

- Collaborating with cross-functional teams to identify and define data-driven solutions to healthcare problems which have the potential to transform healthcare
- Working with existing teams inside Healthbridge to understand the location of relevant data and mechanisms to access the data
- Using predominantly Python, clean and standardized data
- Analyze the data for actionable insights and learn how to present the data for maximum insights
- Designing and building data pipelines to support new products
- Becoming an expert at prompt engineering to create LLM-based products for our clients and creating AI agents to perform repetitive tasks
- Building and testing bespoke machine learning models to solve specialized problems in the clinical and administrative side of healthcare.
- Developing and deploying machine learning models to enhance existing products or enable new product development
- Communicating findings and recommendations to stakeholders in a clear and compelling manner
- Staying up-to-date with the latest advancements in data science and machine learning, and exploring ways to apply them to the healthcare domain

Job requirements

Above all, we are looking for a very smart and highly motivated individual who is excited for an incredible journey of growth and learning. All qualifications and experience are secondary to this requirement.

Knowledge and skills

- Problem-solving
- Incurable curiosity
- Out-of-the-box thinking

Qualifications and experience

- A tertiary degree in a mathematics-based field like Engineering, Computer Science, Software Engineering, Actuarial Science
- Basic experience in programming focussed on extracting, transforming and analysing data (e.g. Python, Matlab or R)

Competence

- Highly self-motivated and ambitious
- Really, really fast learner
- Passion for challenging, meaningful work



- Willingness to work as a member of a team, to work on personal brilliance while making the team better as a whole.
- Prepared and committed to continual learning and self-development
- Ability to recognise and appreciate constructive feedback and constructive criticism