

Job Description	
JOB TITLE	Data Scientist
CAREER STEP	Professional, Career Step 3
REPORTING RELATIONSHIP	Data Science Lead (Global)
DIVISION	Biostatistics & Data Science
EMPLOYMENT DURATION	As per contract
TYPE OF EMPLOYMENT	Full Time
DATE	6 March 2024

About The George Institute

The George Institute for Global Health was established in 1999 with a mission to improve the health of millions of people worldwide, particularly underserved populations, by challenging the status quo and using innovative approaches to prevent and treat the world's biggest killers: non-communicable diseases and injury.

With offices in Australia, China, India and the UK, our 700+ people support 245+ active projects and clinical trials across 50+ countries, with 400+ more staff across our social enterprises. We focus on the global health challenges that cause the greatest loss of life, the greatest impairment of life quality and the most substantial economic burden, particularly in resource-poor settings.

Together with our academic partners, UNSW Sydney in Australia, Manipal Academy of Higher Education in India and Imperial College London in the United Kingdom, we work with a global network of collaborators, undertaking clinical, population and health systems research.

What we do

- Lead world-class, large-scale clinical trials, epidemiological studies and health systems research to transform treatments and healthcare delivery
- Look beyond single diseases, across the life course, to identify patient-centred approaches to care that can be implemented at scale
- Develop low-cost, innovative solutions to global unmet needs
- Drive our global impact through a program of research, advocacy, thought leadership and disruptive social entrepreneurship

For more information about The George Institute, visit www.georgeinstitute.org.

Context of the Role

TGI's Data Science capability plays a pivotal role in our mission to harness the power of data to improve health outcomes globally. With an increasing in demand for data science expertise across grants and programs, TGI developed a data science strategy and implementation plan. As part of our commitment, we aim to expand our data science team across India, Australia & UK.



The Role

The Data Scientist will have the responsibility of independently delivering high-quality implementations of data science and AI techniques to address health research challenges and organisational development. They will work with a diverse range of datasets, including both structured and unstructured data such as text and images. Additionally, the scope of this role will involve presenting proof of concepts for the responsible use of Generative AI, including Large Language Models (LLMs).

Reporting Relationships

The Data Scientist will report to the Data Science Lead (Global) within the Biostatistics & Data Science Division. They will be responsible for collaborating with internal stakeholders worldwide, spanning various programs and capability teams throughout TGI.

Duties and Key Responsibilities

- Collaborate with research program areas and Data Science team in conceptualizing problems
- best suited for data science & AI led solutions in health research
- Immerse in the context of the research area/business area and develop a deep understanding
- of the problem and define requirements accordingly
- Design and propose robust solutions with a focus on ethical and responsible usage of AI
- Collect, prepare, and preprocess data as relevant for downstream analysis and modelling tasks,
- ensuring high data quality and integrity
- Iteratively build and fine-tune analysis/models leveraging state-of-the art machine learning
- techniques ensuring optimal performance, interpretability, and accuracy
- Develop rigorous testing and validation procedures while evaluating models, ensuring
- accuracy, robustness, and reliability of analysis/modelling outputs
- Interpret findings and communicate results effectively to stakeholders through visualizations,
- reports, and presentations in a clear and understandable manner
- Deploy, monitor and support implemented models leveraging appropriate MLOps tools
- Ensure codes for data pipeline and model development are efficient and well documented
- Contribute/assist in documenting the project and writing high quality reports/publications
- Develop deep stakeholder relationships across the project teams and capability teams
- Be an active member of and contribute to the TGI Data Science Community of Practice
- Stay updated on emerging trends and advancements in data science methodologies applicable to health research

As a Team Member:

- Participate in special projects to improve processes, tools, systems and organisation;
- Take responsibility for personal learning and development and for setting achievable and meaningful work objectives and managing personal targets, meeting obligations of The Institute's Performance Management and Development Policy;
- Demonstrate commitment to The Institute's organisational values, including performing to an exceptionally high ethical standard and focus on integrity, collaboration and teamwork in all efforts.

Work, Health and Safety

- Comply with Work Health and Safety legislation and operate in accordance with established Occupational Health and Safety practice and procedures at the Institute;
- Promote and contribute to a safe, secure environment for staff and visitors.



Skills, Knowledge and Experience

Essential

- Master's or higher academic qualification with degree in either of Computer Science/Artificial Intelligence/Data Science/ Statistics or related field
- Demonstrated experience as data scientist working on a wide variety of machine learning techniques (at least 1 year of work experience)
- Hands-on experience of iterative development including data preprocessing, feature engineering, and model fine-tuning
- Advanced proficiency in Python and experience with relevant libraries (e.g., scikit learn, TensorFlow, PyTorch, Transformers, etc.)
- Excellent problem-solving skills, attention to detail and the ability to work in a fast-paced, collaborative environment
- Strong verbal and written communication skills to effectively collaborate with cross-functional teams and convey complex technical concepts to non-technical stakeholders
- Ability to be flexible and adaptable in the face of changing organisational priorities
- Excellent organisational skills, having the ability to organise, take initiative and follow up independently