WE ARE NOW HIRING

Senior Data Scientist (Full Stack)

An exciting opportunity has arisen for a Senior Data Scientist (Full Stack)

Type: **Permanent**
Closing date: **23 November 2026**
Apply now: **Email CV to: recruitment@tianaconsulting.co.za**

Main Purpose of the Job:

Data Scientist will be responsible for the application of data science and advanced quantitative methods, which include machine learning, deep learning, artificial intelligence, predictive analytics to enable key strategic, tactical, and operational use-cases for the purpose of the driving the broader data science programme - as per the organisation Digital Strategic Framework. Responsible for the end-to-end data lifecycle – from strategic planning, data collection, through monitoring, evaluation, and incremental improvement.

General purpose of this job:
In this role, you will enhance the organisation's current and future analytic environment and data platforms as well as associated develop data product and services for the consumption of both the organisation and municipal teams – as well as to enhance and develop the organisation's data-as-a-Service offering. Further the purpose will include the identification of key organisational problem statements, opportunities, user data-experience and journey requirements, through data collection, and using a wide range of statistical, machine learning, and applied mathematical techniques to deliver insights, and predictive-analytics to decision-makers. In addition, you will provide technical advisory and support to snr data teams and decision makers in municipalities within the domain of

Requirements:

- Bachelor's or Honour's degree in Statistics, Mathematics, Applied Mathematics, Physics, Econometrics, Actuarial Science or equivalent experience
- Masters in Statistics, Mathematics, Applied Mathematics, Physics, Econometrics, an advantage
- 6+ years data science and analysis experience
- Team management/leadership experience
- Project Management (classic and agile) experience
- Proficient in Python, R, and database technologies

Key Performance Areas:

- Support the chief digital officer and snr data architect using a variety of state-of-the-art cloud-based technologies to solve data analysis and prediction problems.
- Identify and act on new opportunities for data driven business in data science and analytics.
- Recognise when existing solutions can be generalised to solve new problems and address new data-as-a-service verticals
- Work in a collaborative environment developing data science methods, tools, and algorithms to solve problems.
- Become fluent in analytical modelling using the organisation's internal data modelling platforms and tool
- Continuously learn and apply latest and fit-for-purpose, open-source and proprietary tools and technologies to achieve results, including some or all of the following:
    - Cloud
    - Microsoft Azure (must)
    - AWS
    - Google Cloud
    - Big Data
    - Mondo dB

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- Hadoop
- Cassandra

Machine Learning

- Kubeflow
- TensorFlow
- PyTorch

Business Intelligence/Analytics and visualisation

- Microsoft Power BI (must)
- Microsoft Excel (must)
- Google Charts

Languages

- Python (must)
- R (must)
- SQL (must)
- Associated tools and technologies as they become available, and the platform evolves
- Load and merge data originating from diverse sources
- Performa data cleansing, and quality management
- Pre-process and Transform data for model building and analysis
- Troubleshoot data quality issues and work with team members to reach solutions
- Perform descriptive analytics to discover trend and pattern in the data
- Create visualizations, including dashboards to provide insights on large data sets and input to finished reports
- Develop predictive models for business solutions
- Deploy predictive and other models to production.
- Analyse output products to assure data quality and conformance to requirements.
- Develop technical specification for 3rd party platform data integration and streaming
- Participate in continuous improvement efforts to increase available data quality and speed of delivery
- Address ad-hoc domain-specific data analytic requirements from domain or cluster leaders; and a continuously deliver user-centric data visualisations, publications, and products

Outputs to be delivered

Data Preprocessing and Transformation

- Demonstrate ability to transform raw data from multiple data sources.
- Ability to understand the business requirements specification and use the suggested template to transform data.
- Ability to understand the differences between data types and transform the data types when required.
- Ability to write ETL jobs and automate pipelines when required.
- Ability to investigative anomalies when loading data into the required data source
- Ability to source external data sources to be used in machine learning processes.
- Ability to determine and set direction on which platform tools to use for data transformation.
- Exploring the data for patterns and trends,
- Ability to translate and reproduce mockups design of data analytic dashboards

Modelling Building and Deployment

- Demonstrate ability to translate business use case into machine learning problems
- Understand the end to end process of building a machine learning model including data transformations, train test split, saving and deploying machine learning models.
- Assist Senior Data Scientist to deploy machine learning models in production.
- Monitor and debug machine learning pipelines in production.
- Ability to determine and set direction on which platform tools to use for machine learning and deployment.

Strategic orientation and team management

- Articulate a vision and roadmap for the exploitation of data as a valued corporate asset.

Work with senior and executive management to plan and deliver key strategic data analytic projects
- Manage the team of data scientist to deliver all strategic and analytical outputs as required
- Work with team members when required to execute data science team goals.
- Provide feedback to executive management on key projects and initiatives
- Lead or provide support to projects
- Write assessment reports to include performance of algorithms used for machine learning use cases
- identify data science innovations that deliver value for the organisation and its members
- Provide guidance to, and conduct quality control on work delivered by, data scientists
- Proactively develop data products for emerging use cases
- Provide advisory and support to municipal data teams.

Behavioural Competencies
- Demonstrate ability to develop and maintain personal and working relationships with others that aid in completion of work, information exchange and to foster and promotes optimal performance and overall organisational effectiveness
- Demonstrate ability to research and document latest best practice applications of data science pipelines
- Demonstrate ability to complete high quality work without supervision
- Demonstrate ability to work, adapt and contribute to changes in processes within the team

Knowledge required to do the Job
- ETL
- Machine learning
- Deep learning
- Programming
- Data Modelling
- Database configuration and management
- Data visualisation
- Data analysis
- Predictive analytics
- Agile
- Exposure to financial services and/or fast retail/FMCG
- Business acumen

Other Key Competencies:
The candidate must demonstrate the following skills and attributes:

Skills / Abilities required to do the Job

- Ability to develop machine learning tools built in using python, R
- Ability to manage both structured and unstructured data using SQL
- Ability to visualise data using various tools
- Ability to model data for prediction
- Ability to manage time and project deliverables
- Ability to communicate with executives and senior management across sectors (THE ORGANISATION, local government, government, and industry)
- Can work with data to identify patterns, uses judgment to form conclusions that may challenge conventional wisdom, and focuses on the crux of issues to identify high leverage intervention points and strategies

Personal Attributes required for this Job

- Project Management
- Problem solving and analytical
- Diligence
- Good business judgment
- Incumbent to be result and self-driven
- Good communication skills
- Self-direction and eagerness to learn
- Independent worker
- Strong time-management skills
- The ability to work on multiple projects for multiple stakeholders
- The ability work and deliver under pressure
- The ability to build internal and external relationships
- The ability to solve problems.
- The ability to rotate around a problem, to see if solutions can be gained in different ways.
- The ability to work in an ever changing, unstructured environment.
- The ability to learn new data tools and technologies speedily and deploy
- The ability to work as part of a team, with vastly differing skill sets and opinions.
- The ability to contribute ideas to the quorum.
- The ability to mentor and provide guidance for other team members.
- A systems approach to thinking, as opposed to a siloed approach. The candidate needs to understand how their work affects the greater system.
- The ability to work without supervision and take accountability for the work they deliver.
- The ability to liaise with a client, sifting through the fluff and extracting the actual requirements.

If you need more information about the position, please contact us on 011 431 1354, one of our Consultants will assist you.