

Position Description



Position Title	Senior Data Scientist
Position No	00080952
Delegation Level	007
Job Designation	Manager
Organisational Unit	Data & Analysis SEQ Assets
Work Centre	Brisbane
Position Type	Permanent
Rail Safety Worker	No
Medical Fitness Standard	Refer to relevant business instructions.
Performance Plan Type	Tech Professional Expert
Shiftworker	No
Classification (Range)	AS6 .1 - AS6 .4
Pay Scale Type	ASPT
Reports to Position	Data Analytics & Reporting Manager

QUEENSLAND RAIL VALUES:

1 Queensland Rail - We do better together
Treat others with respect - We appreciate everyone's contributions and differences
Empower our people - We have confidence in our people
Act Safely - We work safe, to go home safe
Make a positive difference - We learn from today, to improve tomorrow

Position Purpose

Through the application of analytical processes, stakeholder management and research skills; participate and lead the development of Asset Management Analytics that directly and positively impact on Organisational KPIs.

Position Responsibilities

1. Participate in the development of advanced capacity and reliability analysis through the application of rigorous statistical and mathematical modelling, complemented by an understanding of the theoretical and technical aspects of rail networks.
2. Assist the development of business process, methodologies and decision support systems that support 1 Queensland Rail in achieving our strategic objectives, particularly those that align with the strategic public transport visions of the Government and relevant departments.
3. Participate in the research and development of advanced Asset Management models through the study of literature and analysis of historical trends, with emphasis on providing statistical advice that will directly impact the performance of Organisational KPIs.
4. Develop new, and complement existing, modelling and analysis that informs business and strategic decisions regarding the performance and utilisation of Queensland Rail assets to better serve our customers and stakeholders.
5. Review, revise and summarise complex technical and theoretical concepts, developed through research and analysis, to colleagues, management and stakeholders through effective communication in forms such as technical and managerial presentations and reports.
6. Incorporate strategies and operations of both local and international rail operators and maintainers through the study of academic

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literature, case studies and technical reports; particularly with the focus of improving efficiency of Asset Management while achieving rail transport outcomes outlined by the Government and relevant departments.

7. Perform various other tasks in the Digital Assets and Analytics team as dictated by demand for analysis, technical advice and planning activities.

Additional Factors

The appointee will be required to :-

- Comply with Queensland Rail's Code of Conduct;
- Observe all legal and safety obligations of the organisation;

What is the key selection criteria

1. High level of skill in the use of PC based computer applications for executive reporting and presentation and for use in managing large data sets for simulation and data analysis.
2. High level of skill in the development of analytical models to support Strategic Asset Management.
3. High level of programming experience with the use of modern analytical languages and associated libraries.
4. High level of analytical, research, problem solving, data analysis and data visualisation skills.
5. Substantial knowledge of principles of rail operations and asset management.
6. Substantial interpersonal, communication, consultation and report writing skills.
7. Knowledge of and willingness to commit to and work within Queensland Rail's Values and Behaviours.

Pre-employment Checks:

Not Applicable

Mandatory Qualifications (If not already held, I will gain these when in position)

- 40007588 Wunya Induction
- 40001627 Building Emergency Procedures

Enterprise Qualifications (If not already held, I will gain these when in position)

- 40009601 Code of Conduct Refresher
- 40006537 Rail Safety Awareness

Health, Safety and Environment Responsibilities

Comply with the overarching document called Health, Safety and Environment Responsibilities MD-11-6843 located in the Safety and Environment Management System.

Personal Protective Equipment needs:

Refer to relevant business instructions.

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Safety Publications

Refer to relevant business instructions.

Please Note:

Queensland Rail has a random alcohol and other drug testing program.

Testing can occur anywhere, at any time, on any day.