



Position Description

Position title:	Senior Data Engineer
Entity:	Austroads
Division:	Data & Technology
Job Type:	Full – time (1.0 FTE)
Location:	Austroads' Melbourne or Sydney Offices
Reports to:	Head of TCA Application Delivery
Responsible GM:	Chief Data & Technology Officer
Direct reports:	Nil
Date reviewed:	23 February 2026

Organisational Context

Austroads is the association of Australian and New Zealand transport agencies.

We provide authoritative, practical and impartial advice, information, tools and services to help our members to deliver safe, efficient and reliable mobility to their customers.

We also deliver value to a range of other key stakeholders across government, industry and communities, where there is a demonstrated societal benefit to do so.

Austroads comprises several business activities, including the core Austroads work program, the National Exchange of Vehicle and Driver Information System (NEVDIS), and Transport Certification Australia (TCA).

Our teams are located across Australia and New Zealand. We work in an integrated and collaborative way, along with external consultancies and other partners, to ensure our products and services are delivered successfully and maximise value.

Austroads promotes a culture of professionalism, innovation, and integrity, with a commitment to accountability, quality, and excellence in the delivery of all of our programs and services. Austroads values continuous improvement, and all staff are expected to engage in their work in a spirit of curiosity, collaboration, and proactivity.

We recognise the unique skills and abilities of each individual, who come from a wide range of disciplines and backgrounds. We support our people through ongoing development and learning opportunities and create a supportive team environment for all our staff. We strive to be an employer of choice.

Austroads takes inclusion and diversity seriously. We embrace difference and diversity of identity, experience and thought, and actively strive for inclusive behaviours across our company and our work.

The Role

Team Purpose

The Data and Technology team focuses on harnessing the power of data and technology to support our member organisations to deliver an improved outcomes for roads and transport users.

Our mission is to enable data-driven decision-making, enhance operational efficiency, and create value for our stakeholders. We do this through the proactive development and implementation of contemporary D&T standards and systems.

Here are some key points that encapsulate our purpose:

We treat data as a valuable corporate asset. Our team aims to deliver its completeness, quality, security, and accessibility, allowing us to derive meaningful insights and drive informed actions.

We leverage state-of-the-art technologies; and we use the best systems for the task. Our goal is to empower our organization with scalable, reliable, and agile solutions.

We collaborate closely with business units, ensuring alignment between data/technology strategies and organizational goals. By bridging the gap between technology and business, we drive holistic transformation.

Our group serves as an innovation hub, constantly exploring emerging trends and experimenting with novel solutions. We foster a culture of curiosity, experimentation, and continuous learning.

Our Data and Technology team is not just about bits and bytes; it's about unlocking the full potential of data/technology to propel our organization forward.

Position Purpose

The Senior Data Engineer will assist in the design, development, enhancement, and maintenance of complex data pipelines products that manage business critical operations, and large-scale analytics pipelines. Reporting to the Head of TCA Application Delivery, the Senior Data Engineer will work on Big Data systems design focusing on data architecture in our Databricks ecosystem.

Major Responsibilities/Accountabilities

The role is responsible for:

- Designing and development of data insights processes (SQL/Azure Cloud based), the data model and the business operations
- Providing technical insights towards functional and non-functional requirements for the new and existing features within the Databricks ecosystem
- Scoping and executing required solutions together with a multidisciplinary team that includes Data Analysts, Data Administrators, GIS Analysts and Business SMEs to understand platform capabilities and how to best improve and expand those capabilities to support client requirements
- Designing, developing, enhancing, and maintaining complex data pipeline products which manage business-critical operations and large-scale analytics applications
- Supporting analytics, data science and/or engineering teams and understanding their unique needs and challenges
- Embrace the processes, methodologies, standards, and technology choices
- Contributing to continuous improvement, identifying ways to enhance value for our members and the public
- Maintaining and adherence to Quality Systems processes and procedures associated with the role

- Other duties as directed.

Key Stakeholder Interfaces

Internal

- Head of TCA Application Delivery
- Senior Data Engineer
- All staff

External

- Austroads approved external vendors and suppliers
- Austroads member organisations
- Road managers and regulatory bodies

The Person

Qualifications, Knowledge, and Experience

The Senior Data Engineer will possess:

Required

- Demonstrated experience in Big Data solutions in a cloud ecosystem, including Data/Delta Lakes
- Demonstrated experience with Big Data pipelines or DAG Tools such as Azure Data Factory, Spark (especially Databricks, Spark and Delta Lake)
- Hands-on Python/Pyspark/SparkSQL experience; Scala experience is a plus
- Experience with source control (GitHub Enterprise)
- SQL syntax experience, specifically to write complex, highly optimised queries across large volumes of data
- Demonstrated experience working in an Agile Scrum/Kanban environment as well as delivery-based test/release approach.

Desirable

- Data modelling/Data profiling capabilities with Kimball/star schema methodology
- Experience with Kafka, or other live data streaming technology
- Experience with database deployment pipelines
- Experience with one or more unit testing or data quality frameworks
- Experience in working with Telematics Data and Road Maps
- Experience with conceptual, logical and/or physical database designs is a plus.

Personal Qualities

The incumbent will need to present a professional image and build a strong relationships across the enterprise. Specifically, the role requires:

- Self-management and personal leadership
- Sound judgement and problem-solving ability
- Strong networking and teamworking skills
- Strong attention to detail
- Commitment to ongoing professional development and learning
- Professional ethics and integrity

- Comfort working in an environment which is constantly evolving.

Capability Profile

Digital and Technological Proficiency	Integrates digital and technological developments in the design and delivery of relevant policies, programs and services.	Advanced
Data Literacy	Utilises diverse data sources to improve the speed and quality of service delivery and decision making processes.	Advanced
Flexibility and Adaptability	Adjusts approach in line with changing priorities. Is open to acquiring and developing skills and knowledge, adapts to new ways of working or organise work to deliver results.	Intermediate
Critical Thinking and Problem Solving	Objectively analyses and evaluates available data, points of view, needs of stakeholders and potential solutions before recommending relevant actions or decisions.	Intermediate
Project / Work Delivery and Management	Defines work activities required to deliver against outcomes intended, in line with agreed timeframes, resources, and ways of working. Understands and applies effective project planning, coordination and control methods.	Intermediate
Communicating with Impact	Uses various communication media to convey information, ideas, and insights in ways that maximises understanding of key messages. Possesses good written and verbal communication skills.	Intermediate
Working Collaboratively	Collaborates with others, demonstrating an understanding of their value to the organisation.	Intermediate