



Government
of South Australia

Department for Infrastructure
and Transport

Data Engineer (ASO5)

Role statement

Organisational alignment

Division: People and Corporate Services
Directorate: Information Services
Section: Business Solutions

Reporting relationships

Reports to: Team Leader Data and Analytics Platforms
Direct reports: 0 FTEs

Role overview

As a member of the Data and Analytics Platforms Team, you will play a role in contributing the departments data initiatives. You will be engaged in a variety of projects that revolve around data processing, curation, and visualization, with the ultimate goal of enabling data-driven decision-making across the department. The focus of this role is on efficiently handling data, transforming it through robust data pipelines, and presenting valuable insights in a manner that is both clear and accessible to stakeholders at all levels.

Further information about the Department can be found at: <https://www.dit.sa.gov.au/about-us>

Our values

We pride ourselves on applying these values to our day-to-day interactions and individual performance. They shape our approach to achieving our strategic agenda.



Collaboration

We work together as one team to serve our customers.



Honesty

We are honest, open and act with integrity.



Excellence

We commit to excellence in everything we do.



Enjoyment

We enjoy our work and recognise our success.



Respect

We respect, understand and value the people we serve.

Key outcomes required of the role

- **Supporting Agency Programs and Projects:**
Assisting in the delivery of assigned tasks related to data, contributing to various agency programs, projects, systems, and policy development processes
- **Assisting in Incident Resolution:**
Supporting the resolution of data-related incidents by providing timely and creative solutions that align with agency objectives. This may involve collaborating with more experienced developers and engineers to learn and apply new techniques and methodologies.
- **Applying Configuration Changes:**
Assisting in the implementation of infrastructure configuration changes as needed, following the Department's Change Approval process, with guidance from senior team members.
- **Monitoring and Performing Health Checks:**
Regularly assisting in the monitoring of the Data Lake and associated Data Pipelines to ensure they are functioning optimally. Supporting the identification and resolution of any issues, under the supervision of more experienced team members.
- **Enhanced Collaboration and Communication:**
Actively participating in team discussions and meetings, fostering a collaborative environment by sharing ideas and feedback, and effectively communicating data-related needs and solutions to colleagues and stakeholders.
- **Continuous Process Improvement:**
Contributing to the identification of areas for improvement within data processing and visualization workflows, supporting efforts to implement best practices and enhance overall team efficiency.
- **Support for Data-Driven Decision Making:**
Assisting in the preparation and presentation of data insights and visualizations that enable informed decision-making, working closely with analysts and other team members to ensure that data is accurately represented and easily interpretable.
- **Contribute to a safe, diverse and healthy work environment free from discrimination and harassment by working in accordance with our values, legislative requirements, the Code of Ethics for the South Australian Public Sector, equal employment opportunity and departmental human resource policies, including Work Health Safety and Wellbeing requirements.**

Special conditions attached to the role

- A National Police Check (NPC) is required prior to employment in the Department for Infrastructure and Transport which must be renewed every three years.
- A Working with Children Check (WWCC) is required for this role.
- Some out of hours and weekend work may be required.
- Some intra / interstate travel may be required.

Educational qualifications / licenses

- A Degree or relevant experience in the fields of computer science, software engineering or related discipline.

Technical capabilities

- **Basic Understanding of Data Analysis Techniques:**

OFFICIAL

Familiarity with fundamental data analysis methods and techniques, with the ability to write basic Python code to assist in data integration and management.

- **Hands-On Experience with Database Technologies:**
Experience working with SQL databases, with an understanding of NoSQL concepts. Ability to write simple to intermediate SQL queries.
- **Developing Skills in Data Visualization:**
Familiarity with creating basic BI dashboards and reports using tools like Power BI with a focus on improving user-friendliness.
- **Foundational Knowledge of Data Integration and Cleansing:**
Basic understanding of data integration, query optimization, data cleansing, and data warehousing techniques, with an eagerness to develop these skills further.
- **Teamwork and Task Management:**
Ability to work under supervision, plan and coordinate assigned tasks, and meet deadlines within set timeframes, while managing conflicting priorities with support.

Person capabilities

[Our Capability Framework](#) describes the core capabilities, behaviours and skills required for us to meet our strategic objectives and be a modern public sector, attracting, developing and retaining the best talent. The framework is constructed around five categories of capability; personal attributes; building relationships; achieving results; leadership and growth; and performance enablers.

Refer to our framework for the detailed capabilities required for this stream. This role is classified as:

Stream 2: Leader

Stream 2 roles would typically consist of supervisors and senior team members, including those with technical knowledge (indicative classifications include ASO4-6, PO2-3, OPS4-7, TGO2-5, M3-7, WPA2, WBT7-10).

Key selection criteria

The criteria outlined below are drawn from the most significant requirements of the person capabilities (from Our Capability Framework) and technical capability, professional knowledge and experience to be addressed in your application having consideration of the role overview and key outcomes.

- **Technical Aptitude in Data Engineering:**
Applicants should demonstrate a foundational understanding of data engineering concepts and relevant industry technologies.
- **Experience with Data-Focused Projects:**
Proven ability to contribute to data-related projects, showcasing participation in team efforts or academic projects that involve data processing or analysis.
- **Integrity and Professional Accountability:**
Demonstrates integrity and a sense of urgency while positively supporting change and risk management initiatives in all business interactions.
- **Customer-Focused Approach:**
Understands and is responsive to customer needs and perspectives, providing a professional experience while managing outcomes in a timely manner that respects departmental systems, processes, and policies.
- **Competency in SQL and Python:**
A solid understanding of SQL and basic proficiency in Python, with the ability to write simple queries and scripts for data manipulation.
- **Experience with Data Visualization:**
Some exposure to creating data visualizations and dashboards using tools like Power BI or Tableau is desirable.
- **Shows respect for diverse backgrounds, experiences and perspectives including that of Aboriginal and Torres Strait Islander people. Values diversity of thought.**
- **Shows genuine care for the safety and wellbeing of self and others.**

Approved

Signature: _____ Date: _____

<Insert name, job title>

People, Culture and Capability Use Only	KNet ID: #24338465	ANZSCO code: <Insert #>	Position number: M36935
--	--------------------	-------------------------	-------------------------