



POSITION DESCRIPTION

POSITION TITLE:		Senior Data Engineer			
POSITION NO:		100600	CLASSIFICATION:		Band 8
DIVISION:		Corporate, Business and Finance			
BRANCH:		Information Services			
UNIT:		Business Solutions			
REPORTS TO:		Senior Coordinator Business Solutions			
POLICE CHECK REQUIRED:	Yes	WORKING WITH CHILDREN CHECK REQUIRED:	No	PRE-EMPLOYMENT MEDICAL REQUIRED:	No

This position is required to provide evidence of COVID-19 double dose vaccination. We will work with individuals to assess their ability to meet this requirement on a case by case basis.

Yarra City Council is committed to being a child safe organisation and supports flexible and accessible working arrangements for all.

This includes people with a disability, Aboriginal and Torres Strait Islanders, culturally, religiously, and linguistically diverse people, young people, older people, women, and people who identify as gay, lesbian, bisexual, transgender, intersex, or queer.

We draw pride and strength from our diversity, remain open to new approaches and actively foster an inclusive workplace that celebrates the contribution made by all our people.

POSITION OBJECTIVES

The Senior Data Engineer will contribute to the development and maintenance of Councils' data ecosystem. Reporting directly to the Senior Coordinator Business Solutions, you will be a key part of the Business Solutions team, working within the City of Yarra Digital Transformation Program. You will be part of the broader Yarra Information Services team, and work alongside IT and product teams, to deliver contemporary data solutions to our enterprise customers.

You will use your knowledge of data engineering to create data pipelines, using the tools and standards defined by the architecture team. Ideally, you will also have experience with data modelling to enable you to collaborate with a Data Architect to design and implement data models to meet various business needs. You will be directly involved in the development of the new City of Yarra Data Hub.

ORGANISATIONAL CONTEXT

The Municipality is committed to efficiently and effectively servicing the community to the highest standards, protecting, enhancing, and developing the City's physical and social environment and building the population and business base. A major imperative of the Organisation is the introduction of a best value framework with an emphasis on customer service and continuous improvement.

The Information Services Branch is responsible for the following

- Technology Services which include service support, desktop support, Infrastructure and Network Support and Business Analysis.
- Digital Transformation
- Data Services including data management and Geospatial Services

ORGANISATIONAL RELATIONSHIP

Position Reports to: Senior Coordinator Business Solutions

Position Supervises:

Internal Relationships: The incumbent liaises primarily with the Digital Transformation team and Information Services staff. There may also be engagement with other Council staff including management, as required to support design, development, and testing of data products.

External Relationships: The incumbent is required to negotiate and maintain a professional relationship with relevant internal and external stakeholders.

KEY RESPONSIBILITY AREAS AND DUTIES

Data Engineering

- Develop and maintain data pipelines using SQL Server, SSIS, Azure Data Factory and other Microsoft / Azure tools.
- Ingest large, complex data sets that meet functional / non-functional business requirements.
- Implement internal process improvements: automating manual processes, optimising data delivery, re-designing infrastructure for greater scalability.
- Assist the establishment of the infrastructure required for extraction, transformation, and loading of data from a wide variety of data sources including Oracle, SQL Server, and Azure 'big data' technologies.

- Work with report developers or independently, to build analytics products that utilise data pipelines to provide actionable insights into internal and external customer activities, operational efficiency, and other key business performance metrics. Including the design, delivery, and operation of data sets to BI/reporting platforms such as PowerBI.
- Work with stakeholders including the Executive, Business, Data and Design teams to assist with data-related technical issues and support their data infrastructure needs. Support data and analytics team members to strive for greater functionality in their data systems.
- Plan, execute and maintain effective data storage, security, and publishing within Council.
- Deliver data pipeline end to end to specifications.
- Undertake analysis in order to define business rules for data mappings, including defining transformational rules.
- Desirable - data modelling experience, data warehouse design, and advanced skills in building and maintaining a SQL data warehouse and complex extracts.

Customer and Stakeholder Management

- Establish and proactively manage internal relationships.
- Foster a partnership approach to working with stakeholders and teams across the organisation.
- Ensure that customers (both internal and external) receive advice that achieves the best possible business process improvement outcomes.
- Act as an advocate for customers in resolving information technology issues.
- Act consistently and fairly with all customers, focusing on resolving issues and performing with a customer focused attitude.
- Promote the values and behaviours of the Information Services branch as a key service provider to businesses of the City of Yarra.

ACCOUNTABILITY AND EXTENT OF AUTHORITY

- Provide specialist knowledge, guidance, and advice to the Head Data Engineer and (if requested) to the Manager Information Services, having the authority and freedom to act set by broad goals within established operational and budgetary guidelines within the provisions of relevant Acts, Regulations, Codes and City of Yarra policies.
- Report on a regular basis to the Head Data Engineer to ensure adherence to set plans, project deliverables and keep informed of significant issues of operational and strategic importance.
- Develop, interpret, and apply relevant policy options, procedures and strategic plans.
- Undertake identified project and tasks that support project delivery.
- Contribute to the development of strategies and plans that support the establishment of service standards in in line with business improvement.
- Use independent judgement and problem solving on a day-to-day basis.
- The incumbent must be able to work autonomously with minimum supervision.

Safety and Risk

- Minimise risk to self and others and support safe work practices through adherence to legislative requirements and Council policies and procedures.
- Report any matters which may impact on the safety of Council employees, community members, or Council assets and equipment.

- Yarra City Council is committed to prioritising and promoting child safety. We adhere to the Victorian Child Safe Standards as legislated in the Child, Wellbeing and Safety Act 2005 and have robust policies and procedures to meet this commitment.

Sustainability

- Embrace the following Sustaining Yarra principles through day-to-day work:
 - Protecting the Future
 - Protecting the Environment
 - Economic Viability
 - Continuous Improvement
 - Social Equity
 - Cultural Vitality
 - Community Development
 - Integrated Approach

Yarra Values

- Behave according to the following values which underpin our efforts to build a service-based culture based on positive relationships with colleagues and the community:
 - Accountability
 - Respect
 - Courage

JUDGEMENT AND DECISION MAKING

- This position requires the application of specialised methods and techniques in relation to data management and continuous improvement.
- Judgement is required in the development and application of methods designed to support the delivery of the organisation's data program.
- This position operates in a broadly regulated environment, receiving little day-to-day management. Management tasks may be in the form of pre-determined objectives and guidelines or special tasks, projects, or assignments.
- The objectives are broadly established through Council policy although guidelines, strategies or tactics may be ill-defined or incomplete, allowing for considerable flexibility in interpretation.
- This position deals with complex or unusual issues and is required to identify and develop policy options for management with the development of new and existing policies and procedures.

SPECIALIST KNOWLEDGE AND SKILLS

- Finds solutions to new problems/opportunities.
- Experience in data engineering domain, working on cloud-based tools.
- Experience in database design, data modelling, mapping, and analysis.
- Experience in setting up and managing data on Microsoft SQL Server and use of associated tools (e.g., SSIS, SSAS etc.)
- Experience in setting up and managing data on Microsoft Azure (cloud certification is a plus)
- Experience in database development and production environments, designing, coding, and testing database solutions such as Microsoft SQL Servers and Azure Data Lake, Azure Synapse, PowerBI
- Data visualisation tools: Power BI
- Understanding of CI/CD pipeline patterns and best practices.

- Good communication skills and ability to work with key stakeholders to produce a desired outcome.
- Understanding of legal, socio-economic and political context.
- Sound knowledge of principles and practices of budgeting and accounting/financial procedures.

MANAGEMENT SKILLS

- Ability to use management capability to achieve goals and objectives.
- Ability to implement personnel policies and practises, including awards, EEO and OH&S policies, recruitment and selection procedures and techniques, position descriptions and staff development schemes.
- Demonstrated experience managing stakeholders including Project Managers and third-party vendors on high profile and innovative solutions.
- Demonstrated ability to lead collaborative process to achieve project goals.
- Self-motivated and driven to achieve results and continually identify ways to improve relationships, outputs, and processes.
- Educate and challenge the organisation to think differently and to actively seek more effective and efficient procedures and processes.
- The ability to connect with people in different settings and work with people to achieve mutual goals.
- Readiness to take responsibility for delivery of project outcomes.
- The ability to establish project actions and plans, and manage project resources (people, budgets, contacts systems and processes).
- A belief in the value of teamwork and the ability to work with others to achieve goals and optimal project outcomes.
- Ability to discuss and resolve systems and process issues with counterparts in other units and organisations.
- Highly developed oral and written communication skills including negotiation and consultation skills.
- Expected to contribute to contribute to long term staffing strategies and work as part of a team.
- Ability to use independent professional judgment when deal with conflicting pressures and issues.

INTERPERSONAL SKILLS

- Proactively shape relationships with key internal and external stakeholders.
- Develops and implements long-term, complex, and multi-phased strategies to build buy-in and support from key internal and external clients or stakeholders.
- Uses a variety of different influencing and negotiating approaches tailored to different clients to achieve desired outcomes.
- The ability to evaluate people and situations to reach logical and fair decisions.
- The ability to think on your feet, make effective decisions and follow through on conclusions reached.
- The ability to make clear, persuasive representation of ideas and facts both verbally and written formats, gain agreement and acceptance of identified actions.
- Challenges others to seek more efficient ways of doing things to resolve issues.
- Ability to persuade, convince or negotiate with clients, members of the public, employees and statutory government personnel.
- Ability to lead, motivate and develop other employees.

- A belief in the value of teamwork and the ability to work with others to achieve goals and optimal project outcomes.
- Ability to move easily between leading, supporting, designing, developing, implementing roles.
- Ability to motivate and develop employees across teams and organisational structures.

QUALIFICATIONS AND EXPERIENCE

- Degree in Computer Science, Statistics, Informatics, Information Systems or other quantitative field plus post graduate qualifications or qualifications/experience in another field with several years relevant experience or lesser formal qualifications with extensive and diversified experience in a Senior Data Engineering role.
- Advanced working SQL knowledge and experience working with relational databases, query authoring (SQL) as well as working familiarity with a variety of databases.
- Microsoft SQL Server - SQL, SSIS, SSAS
- Azure services - Data Factory, Azure Synapse, Azure Data Lake
- Experience building and optimizing data pipelines, architectures, and data sets.
- Experience performing root cause analysis on internal and external data and processes to answer specific business questions and identify opportunities for improvement.
- Strong analytic skills related to working with unstructured datasets.
- Build processes supporting data transformation, data structures, metadata, dependency, and workload management.
- A successful history of manipulating, processing, and extracting value from large, disconnected datasets.
- Working knowledge of message queuing, stream processing, and highly scalable 'big data' data stores.
- Strong project management and organizational skills.
- Experience supporting and working with cross-functional teams in a dynamic environment.

KEY SELECTION CRITERIA

1. Demonstrated advanced working SQL knowledge and experience working with relational databases, query authoring (SQL) as well as working familiarity with a variety of databases.
2. Proven experience both building and optimising 'big data' data pipelines, architectures, and data sets and assembling and analysing large, complex data sets that support business requirements.
3. Proven ability to build processes supporting data transformation, data structures, metadata, dependency, and workload management.
4. Demonstrated successful history of manipulating, processing, and extracting value from large, disconnected datasets.
5. Proven strong organisational skills with the ability to manage multiple projects and competing priorities.