Position Description – Senior Data Engineer

Position Details

Position Title: Senior Data Engineer

College/Portfolio: Finance and Governance

Campus Location: Primarily based at City campus, and the potential to work across other RMIT campuses as required.

Classification: HEW 8 **Time Fraction:** 1.0

Employment Type: Fixed Term

Fixed Term Reason: Specific Task or Project

Reporting Line: Director, Data Architecture and Engineering

No. of Direct reports: None

RMIT University

RMIT is a global university of technology, design and enterprise, committed to creating transformative experiences for students and making a meaningful impact through research, innovation, and engagement. For more information on RMIT University follow the links below.

https://www.rmit.edu.au/about
https://www.universitiesaustralia.edu.au/university/rmit-university/
https://www.rmit.edu.au/about/facts-figures

Our campuses in Melbourne (City, Brunswick, Bundoora, and Point Cook) are complemented by international campuses in Vietnam and a centre in Barcelona, Spain. We proudly acknowledge the Woi Wurrung and Boon Wurrung peoples of the eastern Kulin Nation on whose unceded lands our campuses are located.

We are deeply committed to reconciliation and Indigenous self-determination, embedding these values throughout our policies, culture and structures.

https://www.rmit.edu.au/about/our-locations-and-facilities

Why Join RMIT?

Our people are at the heart of everything we do. At RMIT, we value innovation, collaboration and impact. Our values are the heart (durrung) of who we are and what we stand for at RMIT. They guide what we do, how we make decisions, and how we treat each other.

Inclusion **Imagination** **Integrity** **Courage** **Passion** **Impact**

Learn more about our values: https://www.rmit.edu.au/about/our-strategy/values

Organisational Accountabilities

RMIT is committed to the safety, wellbeing and inclusion of all staff and students. As a staff member, you are expected to comply with all relevant legislation and RMIT policies, including those related to: Equal opportunity, Occupational health and safety, Privacy and trade practices & Child safety standards:

Appointees are responsible for completing all required training and ensuring that they and their team members remain up to date on relevant compliance obligations.

Staff are expected to understand and support RMIT's child safe practices as part of their professional responsibilities. More about our child safety commitment: https://www.rmit.edu.au/about/our-locations-and-facilities/facilities/safety-security/child-safety.

Leadership at RMIT

At RMIT, leadership is not defined by position or hierarchy—it is a shared responsibility demonstrated by all staff, regardless of role or title. Leadership is grounded in our six core values, which guide and shape how we work together, make decisions, and create impact.

Effective leadership means consistently integrating these values into everyday actions and interactions, whether influencing a project outcome, supporting a colleague, or leading a team. All staff are expected to embody the principles of the *Be–Know–Do* Leadership Model:

Be – We are open and authentic, inclusive and empowering. We are purpose driven role models and communicators.
Know – We are self-aware, and understand our stakeholders, our sector and priorities.
Do – We set clear direction and expectations, we develop ourselves and others and promote mutual accountability to deliver results.

At every level, leadership at RMIT is about influence, contribution, and mindset. It is reflected in how we empower others, foster collaboration, and drive positive change through capability-building and alignment to strategic goals.

Office of the Chief Data and Analytics Officer

Office of the Chief Data & Analytics Officer supports and enables RMIT's business strategy by leading and driving the data and analytics agenda for the enterprise. This involves being accountable and responsible for:

- Developing and implementing RMIT's data and analytics strategy and ensuring ongoing alignment with university
- Defining requirements and standards for data and analytics technologies to be delivered by Information Technology
- Coordinating and governing data management activities for analytics and reporting
- Developing and coordinating advanced analytics capabilities to resolve key university challenges

Position Summary

The Senior Data Engineer will have a primary focus on the preparation, maintenance and operation of pipelines that deliver large, complex datasets, that form the basis of analysis, dashboards, statistical analysis & modelling and data quality analysis. They will also deliver: standards and practices for data architecture and engineering; data system design, development and operation; conceptual, logical and physical data modelling.

The Senior Data Engineer will operate in a delivery squad working with Business Partners, Data Management Analysts, Data Analysts, Data Scientists, supporting the team in delivering data driven solutions to a variety of communities across the University. The Senior Data Engineer will also be a key

member of a guild focused on developing Data Architecture and Engineering processes and standards for the Data & Analytics team and other analytics teams.

Key Accountabilities

- Be a member of an agile delivery squad delivering data driven solutions for use across the University.
- Deliver the recommendation, design, implementation and operation of components / tools that enable data driven solutions, including data pipelines – with a focus on cloud-based solutions enabling large scale batch and real-time data pipelines, including monitoring, validation, sampling and other techniques to optimise the quality of data.
- Deliver the development and adoption of standards and processes for data architecture and data engineering activities including AI components, utilising a DataOps approach, including methodologies like continuous integration and deployment.
- Maintain an understanding of the data aligned to the delivery team's area that is collected in a set of applications, databases and data sources, and how the data can be best used to resolve business problems.
- Develop and operate complex, multi-source data sets:
    - That support analytics, reporting & dashboarding, data science & AI and integration to other sets and systems;
    - In an optimised pipeline that meets the Data Engineering standards and processes, including an automated refresh aligned to agreed triggers (time or event);
    - Ensuring appropriate data storage and access techniques are applied;
    - Including investigation and resolution of issues with the pipeline, including data anomalies;
    - That complies to the Data Governance standards, including aligning to term and metric definitions and to RMIT's Logical Data Model (LDM) – where defined, or leading to enhancement of the definitions and / or LDM;
    - That adhere to the requirements for data set certification, and support certification of reports based on the dataset;
    - With registration of the metadata in RMIT's Enterprise Metadata Register; and
    - Support data quality and validation both through providing an understanding of the data and identifying instances of source data that are manipulated to comply to the dataset.
- Transform data into revelatory information that is contextualised for the intended audience.
- Work on the queue for incidents, service requests, and enhancements, according to DataOps practices.
- Actively participate in team initiatives and projects and cooperate with team members in a manner that reflects commitment to team goals and objectives, effective communication, information sharing and problem-solving practices.
- Engage with University policies, priorities and strategic initiatives to improve outcomes for the University.

Key Selection Criteria

- Proven experience (3+ years) working with multiple data sets and distributed computing tools.
- Extensive experience (5+ years) of data transformation languages such as SQL and Python.
- Strong analytic capability, with the ability to integrate team efforts to achieve goals and overall program activities into the larger organisation.
- Demonstrated experience in the design, delivery and operation of data sets for education institutions will be highly regarded.
- Experience in development of semantic models and the configuration of Snowflake's AI components will be highly regarded.
- Experience with agile (data) development and operations (DataOps) will be highly regarded.
- Experience with cloud approaches and capabilities will be highly regarded.
- Ability to design conceptual, logical and physical data models will be highly regarded.
- Experience with Snowflake, dbt, GitHub and SageMaker will be highly regarded.
- Experience with cloud services, in particular AWS, will be highly regarded.
- Understanding of data analytics and data science practice particularly in sampling, experimentation, advanced statistical analysis, triangulation and database design – ensuring engineering deliverables are effective for subsequent use.
- Understanding of software engineering fundamentals and principles and appropriate applications.
- Strong communication and interactive skills – oral, written, visual – including for triaging conflict, navigating ideation barriers, mitigating risk, fostering thought diversity and liaising / negotiating with a range of people to achieve agreed outcomes.

Qualifications

A tertiary qualification in a relevant discipline (Data Science, Computer Science, Statistics, Mathematics, Engineering or related field) and/or equivalent industry experience. Masters and/or PhD degrees are a plus.

Working with Children Check

Appointment to this position is subject to holding a valid Victorian Working with Children Check and other checks as required by the specific role. Maintaining a valid Working With Children Check is a condition of employment at RMIT.