



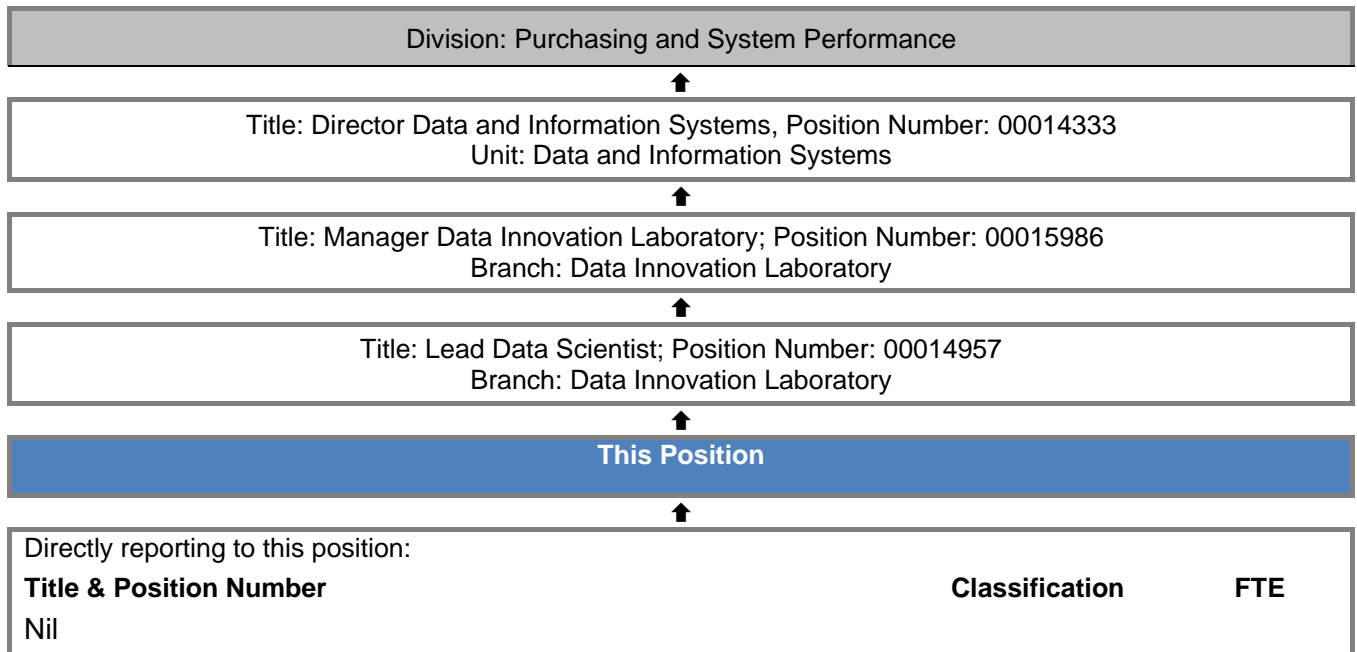
## POSITION DESCRIPTION

<b>Position Number</b>	00021185
<b>Position Title</b>	Principal Data Scientist
<b>Classification</b>	PSO L7
<b>Division</b>	Purchasing and System Performance
<b>Directorate</b>	Information and System Performance
<b>Unit</b>	Data and Information Systems
<b>Position Status</b>	Fixed Term Full Time
<b>Award</b>	Public Sector CSA Agreement
<b>Site Location</b>	East Perth

## ORGANISATIONAL ENVIRONMENT

<b>Our Vision</b>	A WA health system that delivers safe, high quality and sustainable services that support and improve the health of all West Australians.
<b>Our Mission</b>	To lead and steward the WA health system.
<b>Our Values</b>	Purposeful, Caring, Collaborative, Open, Outcome-focused

## REPORTING RELATIONSHIPS



## KEY RESPONSIBILITIES

The Principal Data Scientist will lead the development and optimization of machine learning and data-driven applications. This role encompasses managing project lifecycles, providing expert guidance in statistical analysis, data manipulation, and machine learning. They will manage stages of the data science and model lifecycle for data science solutions and models deployed and maintained by the data innovation lab.

The Principal Data Scientist will mentor team members, ensuring skill enhancement in data science methodologies. Collaborating with stakeholders, this position translates business requirements into robust data solutions, maintaining model integrity and scalability.

## BRIEF SUMMARY OF DUTIES

*This section outlines the results and outcomes required of an individual in this position.*

**Employees are required to undertake all duties and responsibilities in accordance with Department of Health WA Code of Conduct, Policies/Procedures and relevant legislation.**

### Role-Specific Responsibilities

Lead role in projects and provide technical advice on the design and execution of machine learning products to support the consistent delivery and adoption of Data and Information Solutions.

Principal contributor to the development and delivery of machine learning based scripts, code and applications that enable the System Manager to oversee all aspects of health service performance. This includes designing conceptual approaches utilising data science techniques, building and testing machine learning algorithms, researching and employing machine learning algorithms, data preparation, and combining these approaches into pipelines, automation and applications.

Ensures scripts and machine learning algorithms are appropriate, accurate, efficient and secure by understanding and leveraging business requirements, customer feedback, usage metrics, and usability findings. Uses statistical techniques to strengthen consistency and ensures all application development is scalable and software is reliable. Performs metrics analysis post-launch to optimise statistical, pipeline and automation efforts.

Undertakes research into new technologies and methods of using statistical analysis, machine learning and data science (including linked data).

Collaborates with internal teams to define reference architectures and operational processes that will enable globally consistent operation of data and statistical applications and processes (including those on-premises, hybrid and cloud-based applications).

Prepares technology environments, deliverables and data science related communications for all changes to Data and Information technologies that will be consumed by stakeholders.

Issues routine communications regarding maintenance releases, patches and version migrations across the data and information portfolio.

### Analysis, Management and Reporting

Ensures information provided to clients is robust, accurate and available in a timely manner.

Provides advice to the Manager, Lead Data Scientist and key internal and external stakeholders as required.

Provides advice and supports work on the use of data repositories, statistical techniques, algorithms, data science environments and data manipulation techniques, driving the development of innovative information dissemination/reporting solutions including synthetic data approaches that utilise a range of emergent technologies and enable predictive, evidence-based decision making at all levels of the organisation.

### **Leadership**

Supports technical leadership across the data innovation lab and leads and mentors others in data science techniques and methodologies to develop the Department of Health analytics workforce and ensure achievement of key deliverables.

Supports leadership of the delivery of Data Science Solutions that enable the Manager to oversee all aspects of the data lifecycle and champions efforts for continuous improvement in this area.

Champions efforts for continuous improvement in systems functions.

### **Liaison, Representation and Stakeholder Development**

Builds and maintains effective working relationships with key internal and external stakeholders in order to maintain business knowledge, understand prioritisations and effectively liaise, consult, negotiate and collaborate to achieve these.

Contributes to effective consultation processes with stakeholders across the WA health system to ensure Department of Health data collections meet System Manager requirements and reform initiatives.

Interacts with and assists Data Innovation and Data Engineering team members on design of data management systems and best practices.

Participates in and/or supports working parties and project teams involved with associated projects.

### **Corporate Responsibilities**

Supports an environment of customer focus, excellence in delivery, high performance, and accountability within a team environment that values and recognises the contribution of all members.

Complies with corporate policies and procedures and models expected behaviours aligned with both departmental and broader public sector Codes of Conduct and legislative requirements.

Undertakes other duties as required.

## WORK RELATED REQUIREMENTS

Applicants should demonstrate their capacity to meet the following criteria which should be read in conjunction with the specific responsibilities of this role.

Essential Selection Criteria
<ol style="list-style-type: none"><li>1. Demonstrated significant and current experience in analysis of data using data science techniques and use of contemporary data science languages and infrastructure.</li><li>2. Experience working with contemporary coding languages, technologies and development methodologies to create scalable &amp; production ready data science models.</li><li>3. Ability to work in a team and promote an effective collaborative working environment.</li><li>4. Well-developed interpersonal, communication and negotiation skills to influence people and to establish and maintain positive working relationships to achieve outcomes.</li><li>5. Demonstrated conceptual, analytical and problem solving ability within a complex and evolving technology and business environment.</li></ol>

Desirable Selection Criteria
<ul style="list-style-type: none"><li>• Possession of Tertiary qualification in a relevant discipline</li><li>• Knowledge and experience in data science languages, such as R, Python and SQL</li></ul>

Appointment Factors
<ul style="list-style-type: none"><li>– Provision of the minimum identity proofing requirements.</li><li>– Successful Criminal Record Screening Clearance.</li><li>– Successful Pre-Employment Integrity check.</li></ul>

## CERTIFICATION

The details contained in this document are an accurate statement of the duties, responsibilities and other requirements of the position.

Manager/Supervisor	Director/Division Head
NAME:	NAME:
SIGNATURE:	SIGNATURE:
DATE:	DATE: