JOB DESCRIPTION

Job Title	Data Scientist		
Directorate	Strategy, Performance and Communication		
Reporting to			
Grade	10		
Evaluation ref:	RP264	Job Family ref:	

Role Purpose

As a Data Scientist, you will lead the design, development and deployment of advanced analytical models that support evidence-based decision-making across the organisation. Your work will focus on applying machine learning, neural networks, predictive analytics, preventative risk scoring, and simulation modelling to solve complex business problems and improve service outcomes.

Collaboration with cross-functional teams will be key as you identify opportunities for data-informed innovation. This role requires a strong foundation in statistical modelling and data science principles, alongside practical experience with cloud platforms and modern data science tooling. You will play a key role in embedding robust, interpretable, and operationally viable models into business workflows — ensuring that insights are not only technically sound but also trusted, explainable, and actionable.

Accountabilities

Develop predictive and risk-scoring models to support early intervention and preventative service delivery, particularly in high-impact areas such as social care, housing, and public health.

Design and implement simulation models to test policy scenarios, forecast demand, and optimise resource allocation across frontline services.

Collaborate with service leads and analysts to translate operational challenges into data science problems, ensuring models are grounded in real-world context and deliver actionable insights.

Build and maintain robust data pipelines and modelling infrastructure using cloud-native tools, ensuring scalability, security, and data quality from source to insight.

Embed models into business workflows through APIs, dashboards, or automation, ensuring outputs are interpretable, trusted, and used in decision-making.

Champion ethical, explainable AI and model governance, ensuring transparency, fairness, and accountability in all analytical outputs.

Support the development of data products that enable self-service insight and operational intelligence, aligned with the council's data strategy.

Contribute to the council's data culture by mentoring colleagues, sharing best practice, and promoting the value of data science in strategic planning and service design.

Work closely with Information Governance and cyber security to ensure compliance with data protection, security, and ethical standards.

Continuously evaluate and improve models based on feedback, performance monitoring, and changes in policy or service delivery context.

Knowledge / Experience / Skills

	Essential	Desirable
Knowledge		
Predictive analytics and statistical modelling, including supervised/unsupervised learning, risk scoring, and simulation techniques.	X	
Cloud-based data platforms and tooling, particularly within the Microsoft ecosystem (e.g. Azure ML, Fabric).	X	
Model governance and operationalisation, including MLOps, CI/CD for analytics, and the integration of models into business processes via APIs, dashboards, or automation — ensuring outputs are explainable, auditable, and actionable.	X	
Public sector service delivery models, especially the role of data in enabling early intervention and preventative approaches.	X	

Metadata and lineage management – Understanding of tools like Microsoft Purview for tracking model provenance, agent actions, and audit trails.		X
Local government data standards – Awareness of frameworks and their implications for data science integration and interoperability.		X
Experience		
Working with sensitive or operational data in domains such as social care, housing, or public health, with a strong understanding of data protection.	X	
Embedding models into decision-making processes, including experience with APIs, dashboards, or automated workflows.	X	
Communicating technical concepts to non-technical stakeholders – Ability to explain agent behaviour, risks, and safeguards to service leads, IG officers, and senior decision-makers.		X
Automating deployment of data science infrastructure – Use of CI/CD pipelines and infrastructure-as-code (e.g. Azure DevOps) for scalable, secure data science delivery.		X
Qualifications / Registrations / Certifications		
Degree in Computer Science, Statistic, Mathematics, or a related field	X	

Certification in cloud data science (e.g., Azure Data Scientist Associate)	X	
Additional certifications in DevOps, security, or cloud infrastructure (if applicable)		X
Skills		
Designing and deploying predictive models that are interpretable, scalable, and embedded into operational workflows.	X	
Building robust analytical pipelines using Python, SQL, and cloud tooling to support real-time and batch model delivery.	X	
Communicating complex analytical concepts to non-technical audiences through clear storytelling, visualisation, and stakeholder engagement.	X	
Collaborating across multidisciplinary teams, including analysts, service leads, and ICT, to co-design data products that meet real-world needs.	X	
Real-time data processing (e.g., Fabric streaming)		X
Communicating technical concepts clearly to non-technical stakeholders, including service leads and IG officers		X
Automating deployment of data infrastructure and pipelines		X

Working Conditions

Dimensions of the role

The Data Scientist will be instrumental in driving Somerset Council's transition toward a preventative model of public service delivery — where early intervention, predictive insight, and targeted resource allocation reduce demand on crisis services and improve long-term outcomes for residents.

By developing and operationalising models for risk scoring, forecasting, and simulation, the role directly supports the prioritisation of frontline resources — helping services like social care, housing, and public health identify where support is needed most, before issues escalate.

Their work will enable the council to move from reactive to proactive decision-making, using data to anticipate need, optimise interventions, and deliver better value for money. This includes building secure, scalable data pipelines and modelling infrastructure that ensure high-quality data flows from source systems to decision points.

Beyond technical delivery, the Data Scientist will help shape the organisation's data culture — promoting best practice in model governance, fostering collaboration between technical and non-technical teams, and championing the use of interpretable, ethical analytics. Their impact will be felt not just in dashboards, but in the lives of Somerset residents.

Working Arrangements

Somerset Council's Dynamic Working Strategy will be applied to this position.

Corporate Accountabilities

Ensure compliance with all relevant legislation, organisational policy, and professional codes of conduct to uphold standards of best practise.

Deliver the aims of the council's equality, diversity and inclusion policies; health, safety and wellbeing of self and others; and Organisational values in everything you do, ensuring team members are also aware of their responsibilities and maintaining their understanding that Equality and Diversity practice covers both interaction with staff, service users and communities and includes challenging discrimination and promoting equality of opportunity for all.

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Date: