

# SENIOR DATA SCIENTIST

## Job Description

<b>Directorate:</b>	Resources		
<b>Service:</b>	Digital Data		
<b>Location:</b>	County Hall, Preston		
<b>Salary range:</b>	Grade 12	<b>Grade:</b>	12
<b>Reports to:</b>	Data Architect	<b>Staff responsible for:</b>	1

### Job purpose and scope

In this role you will lead data-driven initiatives that deliver cost-effective and impactful solutions across adult and children's social care and procurement. You will work within the IT department, leveraging advanced analytics, machine learning, and cloud technologies to support strategic decision-making and drive service improvement. You will play a key role in developing and maintaining robust data architecture to ensure data integrity, accessibility, and security. Additionally, you will be responsible for mentoring and supporting junior scientists, fostering their technical growth, and encouraging best practices across the team.

### Performance Indicators

- Quality of advice/service against legal, safety and best practice standards
- Achievement of relevant service targets
- Adherence to internal/external quality standards if applicable
- Adherence to policies and procedures
- Accuracy and timeliness of information recording and processing
- Customer and stakeholder feedback
- Leading Lancashire Framework

### Accountabilities/Responsibilities

#### Data Science Delivery and Technical Expertise

- Lead the Design, develop, and implement advanced algorithms and experiments to merge, manage, interrogate, and extract value from complex datasets for bespoke reporting and analysis.
- Apply a broad range of machine learning and statistical modelling techniques to address multifaceted business problems and support strategic decision-making.
- Evaluate, select, and deploy suitable data mining models tailored to the objectives and needs of specific projects, ensuring best-fit methodologies are employed.
- Conduct research to develop prototypes and proof-of-concept solutions, demonstrating innovative approaches to data challenges.

- Continuously assess and improve data sources and data-gathering methods to enhance the quality and reliability of insights.
- Demonstrate strong proficiency in Python for developing, testing, and deploying data science and machine learning solutions.
- Utilise cloud-based technologies, particularly Azure Synapse Analytics and Microsoft Fabric, to leverage scalable data processing and analytics capabilities.
- Stay abreast of emerging technologies, tools, and methodologies within the data science field to drive continuous improvement and innovation.
- Understand and apply data ethics principles, ensuring all data processing and analysis adheres to relevant legal and ethical standards.

#### Insight Communication and Reporting

- Communicate complex data insights and analytical findings in a clear, accessible manner for both technical and non-technical audiences, adapting style and content as needed.
- Create compelling reports and visualisations that effectively narrate the story of service user interactions and operational performance, supporting evidence-based decision-making.
- Challenge and contribute to delivery plans and priorities with informed, data-driven perspectives, fostering a culture of critical thinking and continuous improvement.

#### Leadership, Strategy, and Team Development

- Lead, mentor, and develop a team of data scientists, providing guidance, training, and support to foster both technical excellence and professional growth.
- Recruit and onboard new team members, ensuring a diverse and skilled workforce.
- Develop and oversee the council's strategic direction for data science, shaping the vision, priorities, and delivery framework for impactful data initiatives.
- Implement new systems, processes, and workflows to improve data architecture, accessibility, and operational efficiency.

#### Business Integration and Innovation

- Identify and explore opportunities to apply data science insights and methodologies across various business functions, including HR, marketing, and procurement, to drive organisational improvement.
- Demonstrate a proactive and inquisitive approach to problem-solving, inspiring colleagues and stakeholders about the transformative potential of data science.
- Familiarity with best practices in data preparation, manipulation, and scalable solution deployment, ensuring robust and deliverable outcomes.

#### Strategic Collaboration and Stakeholder Engagement

- Work closely with internal and external partners to uncover business challenges and deliver data-driven solutions that align with organisational objectives.

## Other

- **Equal Opportunities**

We are committed to achieving equal opportunities in the way we deliver services to the community and in our employment arrangements. We expect all employees to understand and promote this policy in their work.

- **Health and safety**

All employees have a responsibility for their own health and safety and that of others when carrying out their duties and must help us to apply our general statement of health and safety policy.

- **Customer Focused**

We put our customers' needs and expectations at the heart of all that we do. We expect our employees to have a full understanding of those needs and expectations so that we can provide high quality, appropriate services at all times.

- **Safeguarding Commitment**

We are committed to protecting and promoting the welfare of children, young people and vulnerable adults.

- **Skills Pledge**

We are committed to developing the skills of our workforce. All employees will be supported to work towards a level 2 qualification in literacy and numeracy if they do not have one already.

## Our Values

### We expect all our employees to demonstrate and promote our values:

- **Supportive**

We are supportive of our customers and colleagues, recognising their contributions and making the best of their strengths to enable our communities to flourish.

- **Innovative**

We deliver the best services we possibly can, always looking for creative ways to do things better, putting the customer at the heart of our thinking, and being ambitious and focused on how we can deliver the best services now and in the future.

- **Respectful**

We treat colleagues, customers and partners with respect, listening to their views, empathising and valuing their diverse needs and perspectives, to be fair, open and honest in all that we do.

- **Collaborative**

We listen to, engage with, learn from and work with colleagues, partners and customers to help achieve the best outcomes for everyone.

## Person Specification

All the following requirements are essential unless otherwise indicated by \*

Your ability to meet the job requirements will initially be assessed by the information provided on your application but further assessment will be undertaken at interview and, in some cases, by using other types of assessment(s).

### Qualifications

- Honours Degree level qualification or equivalent experience in computer science, data science, mathematics, statistics, or a related field.
- Relevant professional qualification or equivalent experience in data science, analytics, or machine learning.
- Evidence of continuous professional development in data science, analytics, or related technologies is essential.
- A master's degree in data science, artificial intelligence, or a related field is advantageous but not mandatory..

### Experience

- Proven experience in delivering data science and analytics projects, ideally within a public sector or local government setting.
- Significant experience in a senior leadership role within a data science, analytics, or digital transformation environment.
- Proven track record of successfully leading and delivering complex data science programmes and projects.
- Experience in developing and implementing data science strategies, including the adoption of modern data engineering and machine learning practices.
- Strong experience in business engagement and stakeholder management, fostering trusted relationships with key stakeholders.
- Practical experience of working with external agencies or partners on data-driven projects and managing both capital and revenue expenditure.
- Evidence of establishing and leading a strong performance culture and effective service quality evaluation that drives up standards and performance.
- Experience with cloud-based data platforms (e.g., Azure Synapse, Microsoft Fabric, Databricks) and scalable analytics solutions.
- Experience in managing relationships with technology and data service providers to ensure the procurement of high-quality data science solutions.
- Experience with automation tools and techniques to streamline data science workflows and improve operational efficiency.
- Proven track record of supporting digital transformation initiatives by implementing modern data science solutions that enhance agility, scalability, and impact.

### Essential knowledge, skills & abilities

- Proficiency in designing and implementing data science solutions, including advanced analytics, machine learning, and statistical modelling.

- Strong knowledge of cloud data platforms such as Azure Synapse, Microsoft Fabric, Databricks, and experience with data engineering tools.
- Knowledge of data governance, data ethics, and security requirements in data science projects.
- Ability to design and implement reliable and efficient data workflows and pipelines.
- Strong experience in business engagement and stakeholder management.
- Experience in vendor management and procurement of data science and analytics solutions.
- Skills in monitoring data pipeline performance, identifying bottlenecks, and optimising resources to ensure high availability and reliability.
- Strong collaboration and communication skills to work effectively with cross-functional teams, translating technical concepts into business terms and providing clear guidance to stakeholders.
- Knowledge of modern data architectures, including multi-cloud and hybrid environments, to support the council's evolving data needs.

#### **Other essential requirements**

- Commitment to equality and diversity.
- Commitment to health and safety.
- Display the LCC values and behaviours at all times and actively promote them in others.