

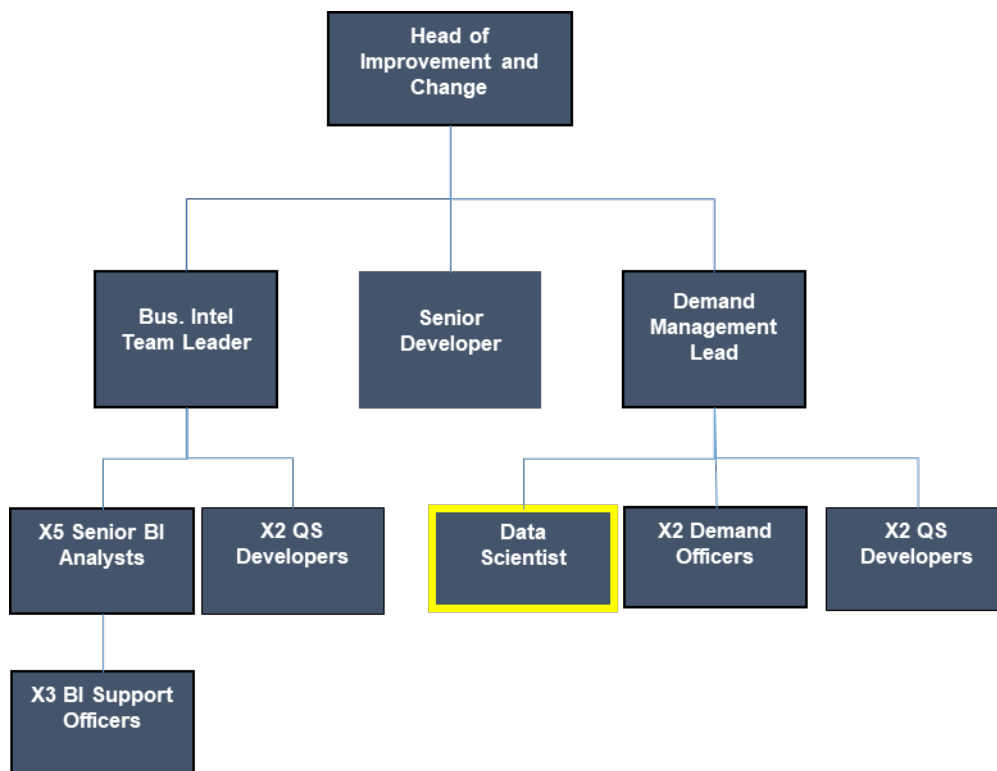
WILTSHIRE POLICE

Job Description



Post Title: Data Scientist	Department: Improvement and Change
Post Number:	Work Location: Devizes Headquarters
Grade: W9	Security Vetting Level: MV/SC
Responsible to: Demand Management Lead	Date: December 2020

Reporting Structure:



Data Scientist

Job Purpose

Data Science is a broad and fast-moving field spanning maths and statistics, software engineering and communications. Data Scientists blend experience and knowledge from a wide range of fields and organisations, and continuously seek to expand their range of technical skills.

Data Scientists find information in diverse datasets to address complex problems and improve organisational processes. They are inquisitive, they explore and visualise data of all kinds, find and present 'stories' within the data in a meaningful way to a range of technical and non-technical audiences. Data Scientists will make recommendations to inform strategic and operational decision making through sourcing, accessing and manipulating data, and engineering data processes. They identify and address data biases, and handle private data ethically and appropriately, complying with (inter)national privacy regulations. They use the insights gathered about the data they have analysed to inform and achieve organisational goals. They achieve desired outcomes by planning, organising and managing resources effectively.

Data Scientists are dynamic and adaptable, addressing varied problems with varied techniques. They actively explore innovative ways to use existing and new statistical, algorithmic, predictive, machine learning and artificial intelligence tools and techniques, to find significant and valuable patterns in data and transform this into information for their organisation. They gather new sources of data and combine datasets to increase their value. Using a scientific approach, they perform statistical analysis, build and validate models from the data, use programming practices, and maintain data, tools and processes to implement robust and valuable data solutions.

Data Scientists have an impact at a strategic and operational level by building and maintaining strong collaborative relationships with key stakeholders, subject matter experts and colleagues at all levels. They engage with the wider Data Science community to share ideas, techniques and experiences.

Main Responsibilities

- Work with policy and operations to understand where data science can add value
- Support strategic and operational decision making in order to create impact
- Support customers and report owners to clarify, scope, and deliver requirements
- Source, access, manipulate and engineer data processes with a variety of data, including identifying relevant external data sets
- Build credible statistical models from the data and use the best coding practices to generate reproducible work
- May draw on other technical and analytical standards from across industry
- Adhere to the data science ethics framework
- Interpret and visualise the data to present the 'story' of data in a meaningful way and to a range of technical and non-technical audiences
- Draft and provide information to support managers and business leads in written and verbal formats, either formal or informally, as required
- Use an evolving range of data analysis tools and techniques, including open source
- Continuously seek to expand a range of technical skills in addition to their leadership and communications development
- Propagate data science skills in other teams, understanding the variety of functional roles relating to data science and how they can be most effectively applied to solve business problems
- Mentoring of new Data Scientists (peers) employed by the Force
- Maintain an interdisciplinary focus, demonstrate intellectual curiosity and open mindedness, learning from best practice and applying these techniques.

Dimensions

Financial -There are no financial dimensions associated with this post

Non-Financial (approx. per annum)

Person Specification

Data Scientist

Attributes	On Appointment	Criteria
Qualifications:	Educated to degree or equivalent level, in Data Science, Information Technology / Computing / Informatics, Science, Maths or Statistics. Educated to A level standard or equivalent (e.g. BTEC) Educated to A level standard or equivalent (e.g. BTEC) in Mathematics	Desirable Essential Desirable
Experience:	Experience within an analytical or data management role. Experience of writing SQL queries to extract and prepare data for analysis. Experience in using statistical software such as R and Python. Advanced level user in Excel. Experience of researching and producing and interpreting statistical information.	Essential Essential Desirable Essential Desirable
Skills:	Data interpretation and problem-solving skills. The ability to manipulate and combine large, complex datasets in innovative ways to gain actionable insights. Ability to critically evaluate statistical output and models, ensuring that conclusions make sense in the context of the business and are actionable. Ability to prioritise workloads under pressure. Ability to work with minimum supervision and use own initiative. Good planning and organisational skills. Excellent team working abilities. Ability to present data science products and recommendations to influence senior and executive level manager's decision making. Ability to produce strategic analysis and forecasting to support the organisations planning and direction. These will include the Force Management Statement, Force Strategic Assessment and the APSTRA's.	Essential Essential Essential Essential Essential Desirable Essential Essential
Knowledge:	Knowledge of statistical modelling techniques and software packages. Understanding of statistical analysis, e.g. logistical regression An understanding of relevant legislation and frameworks, e.g. HRA, DPA, GDPR, MOPI, ALGOCARE Understanding of machine learning and AI techniques General awareness of equality and diversity issues in the working environment. Awareness of workplace health & safety issues. Understanding of the context and issues surrounding the Police Service Nationally and locally and their impact on performance management issues.	Essential Essential Desirable Desirable Essential Essential Desirable

Attributes	After Training
Qualifications:	If apprenticeship route pursued: Higher level education in Data Science (such as L6 Data and Technology Solutions (BSc Hons)).
Experience:	Experience of the Force Strategic Planning process including Force Strategic Assessment and Force Management Statement Implementing and presenting a Data Science tool to all levels of the organisation including the Executive Leadership Team and the OPCC Experience of Force local and national systems, procedures and applications. Representing the Force at external events, sharing knowledge with other Forces and partners and utilising content learned from them to improve in-house practise Researching new and innovative ways to keep in line with industry standards for data modelling.
Skills:	Force lead on data modelling and forecasting Proven/ advanced level skill base in SQL, R or Python Ability to transfer knowledge to other members of the team as well as members of Business Intelligence and Analytics user groups. Ability to advise senior managers, ELT and the OPCC on the best use of analytical tools available. Ability to develop and adapt to changing working practices in order to meet the demands of Wiltshire Police, new legislation or new policies introduced within the Force.
Knowledge:	Understanding of Force operating systems and IST infrastructure. Knowledge of analysis for law enforcement research. Understanding of the National Intelligence Model. Understanding of the ethics of use of Data Science. Understanding of your responsibility under Equal Opportunities and the way in which your role and the organisation may impact on minority and more vulnerable communities within Wiltshire. Greater understanding of relevant health & safety issues within your working environment. Understanding of the impact of the Human Rights Act on the organisation and the role that you undertake. Greater understanding of Data Protection and Freedom of Information issues within your working environment.

Other Information

Data Scientist

Wiltshire Police provides a 24-hour 7 day a week service therefore applicants should be prepared to be flexible in their approach to working hours, in accordance with the police staff council handbook.

The post holder should have access to a vehicle or be able to make alternative arrangements to meet the requirements of the post.

Wiltshire Police is committed to safeguarding and promoting the welfare of children and young people and expects all staff and volunteers to share this commitment.

Where applicable the post holder will be expected to wear a uniform at all times when on duty.

The post holder will be required to attend all necessary and relevant training courses in respect of your employment to ensure compliance with the policies of the Force.

The post holder will be required to attend training and development courses both within and outside the home Force area.

The post holder will be expected to take a pivotal role in delivering change in the quality and co-ordination of continuous improvement activity across the organisation.

USERS - MoPI (Management of Police Information):

Share information where appropriate with community partners and other agencies, paying regard to force procedures for recording such sharing. Ensure information recorded is relevant, accurate and adequate, meets legal requirements and data quality standards.