**Job Profile comprising Job Description and Person Specification**

**Job Description**

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| --- | --- |
| **Job Title:**  Lead Data Scientist | **Grade**:  PO5-PO6 |
| **Section:**  Policy Performance Analysis and Communications | **Directorate:**  Chief Executive’s Group |
| **Responsible to following manager:**  Insight and Analytics Manager | **Responsible for following staff:**  **n/a** |
| **Post Number/s:** RWC7000TS | **Last Review Date:**  August 2020 |

**Working for the Richmond/Wandsworth Shared Staffing Arrangement**

This role is employed under the Shared Staffing Arrangement between Richmond and Wandsworth Councils. The overall purpose of the Shared Staffing Arrangement is to provide the highest quality of service at the lowest attainable cost.

Staff are expected to deliver high quality and responsive services wherever they are based, as well as having the ability to adapt to sometimes differing processes and expectations.

The Shared Staffing Arrangement aims to be at the forefront of innovation in local government and the organisation will invest in the development of its staff and ensure the opportunities for progression that only a large organisation can provide.

**Job Purpose**

The post holder is expected to take a leading role in driving forward all aspects of data science and analytics work across the SSA. The person will work closely with other analysts to support heads of services across the councils, including but not limited to, policy and performance, public health, community safety, housing, adults and children’s services.

**Current Post**

This is a linked grade post. Grade of the successful candidate will depend on their skills and experience.

### Basic Duties and Responsibilities

1. Play a leading role in advancing data science within the SSA by leading on the development and embedding of the data science function.
2. Promote data science skills across the SSA, understanding the variety of functional roles relating to data science and how they can be most effectively applied to tackle business problems.
3. Contribute towards development of SSA’s data and analytics strategy. Lead on key elements of data and analytics action plan.
4. Plan, manage and deliver on a range of data science projects requiring potentially complex analytic input, including negotiating and agreeing the most appropriate data output, initiating and planning workloads and setting delivery timescales.
5. Drive the development and usage of predictive analytics to solve business problems and improve service delivery e.g. develop and test algorithms that can use existing underutilized data sources bring about efficiently and improved performance.
6. Lead a virtual team of data science apprentices across the SSA. As the SSA practice lead provide mentorship, bespoke training and 1:1 consultations to support successful completion of data science apprenticeships. Establish and lead virtual teams of apprentices to work on pertinent data science problems within the organization.
7. Provide technical advice, support and project supervision to staff working on data science and analytical projects within the Chief Executive and other directorates, as directed.
8. Stay on top of developments in the field of data science in industry (particularly local government)/ academia to identify new opportunities for applying new data science techniques and tools.
9. Continue to develop your own technical skills in programming and data science/statistical techniques and provide coaching and mentoring to others to develop their data science skills.
10. Discover and understand the strengths and limitations of new data sources and incorporate them into analytical products.
11. Explore and visualise the data to present the key findings from the data in a meaningful, logical way, and to a variety of technical and non-technical audiences in a manner that improves understanding and decision making; be able to bring out the story of the data and answer the ‘so what’ questions through interpretation
12. Use an evolving range of data analysis tools and techniques, including open source, some of which may have to be learnt quickly, as and when required.
13. Work closely with colleagues from ICT, Data Protection Office, Information Security and other towards making the SSA a more data mature organization by improving data collection, storage, retrieval, access and analyses, and identify areas where data science can bring about improvements.
14. Develop and maintain external relationships (London Boroughs, LGA, GLA etc.) and develop data science led partnership e.g. universities, local CCG etc.
15. Supervise projects or dissertations of university students working with team to complete post-graduate studies.
16. Summarise data on relevant issues, form internal and external sources, for incorporation into reports, briefs, evidence summaries, presentations etc.
17. Ensure that the services for both Councils are dealt with on an equitable basis to deliver the standards required for each, as agreed annually by the Executives of both Councils.
18. The Shared Staffing Arrangement will keep its structures under continual review and as a result the post holder should expect to carry out any other reasonable duties within the overall function, commensurate with the level of the post.

### Progression Criteria

**PO6**

* Independently provide credible and accurate advice on planning and implementation of data projects and data solutions to key stakeholders.
* Represent the Councils externally at meetings with partners and other London boroughs on data science and analytics, and through a positive profile general opportunity for the SSA.
* Independently lead on providing technical guidance, leadership and project supervision to SSAs data science apprentices.
* Independently negotiate sensitive work requests (e.g. content, outputs, deadlines) with internal and external partners that have implications for team’s workload and reputation.
* Lead, with minimum supervision, on the delivery of complex products by bringing together analysts and other stakeholders from across the SSA and external partner.
* Demonstrates ability to provide strategic input and advice to advance data and analytics within the SSA.
* Able to develop briefings (written and verbal) and present to senior management and members.
* Project manage complex data projects from start to finish using various project management techniques e.g. Agile, waterfall.
* Able to deputise for the Team Manager as needed.

**Generic Duties and Responsibilities**

1. To contribute to the continuous improvement of the services of the Boroughs of Wandsworth and Richmond.
2. To comply with relevant Codes of Practice, including the Code of Conduct and policies concerning data protection and health and safety.
3. To adhere to security controls and requirements as mandated by the SSA’s policies, procedures and local risk assessments to maintain confidentiality, integrity, availability and legal compliance of information and systems
4. To promote equality, diversity, and inclusion, maintaining an awareness of the equality and diversity protocol/policy and working to create and maintain a safe, supportive and welcoming environment where all people are treated with dignity and their identity and culture are valued and respected.
5. To understand both Councils’ duties and responsibilities for safeguarding children, young people and adults as they apply to the role within the council.

**Additional Information**

* Due to the nature of the analytical work, there will be occasions when it is necessary to attend and present at meetings outside of the Department, in the evenings and to a public audience.
* Post holder will be expected to work flexibly across two locations (Wandsworth Town Hall and Richmond Civic Centre).

**Current team structure**

**Person Specification**

|  |  |
| --- | --- |
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**Our Values and Behaviours**

The values and behaviours we seek from our staff draw on the high standards of the two boroughs, and we prize these qualities in particular:

**Being open.** This means we share our views openly, honestly and in a thoughtful way. We encourage new ideas and ways of doing things. We appreciate and listen to feedback from each other.

**Being supportive.** This means we drive the success of the organisation by making sure that our colleagues are successful. We encourage others and take account of the challenges they face. We help each other to do our jobs.

**Being positive.** Being positive and helpful means we keep our goals in mind and look for ways to achieve them. We listen constructively and help others see opportunities and the way forward. We have a ‘can do’ attitude and are continuously looking for ways to help each other improve.

| **Person Specification Requirements** | **Assessed by**  **A &**  **I/ T/ C (see below for explanation)** |
| --- | --- |
| **Knowledge** | |
| Proficient in advance statistical concepts and processes (e.g. statistical testing, data distributions, regression, modelling, (un)supervised learning, ROC curve analysis, significance testing, resampling methods) | A/I/T |
| Knowledge and understanding to determine best way to present data and findings (e.g. dashboards, advanced visualisations, infographics) | A/I |
| Knowledge of developments in data science and its applications to business problems and service delivery | A/I |
| **Experience** | |
| 2-4 years of experience working as a data scientist or in a similar advance analytics role | A/I |
| Extensive experience communicating complex analytical information through presentations, reports and verbally | A/I |
| Experienced in identifying and developing data solutions that show improvement in effectiveness, efficiency and improved service delivery | A/I |
| Experience of applying data science techniques such as:   * predictive analysis * forecasting * machine learning (Sklearn/ XGBoost/Caret) | A/I |
| Experience with Software engineering concepts such as:   * Git * Command Line / Shell scripting * IaaC (Desirable) * Server monitoring and troubleshooting (Desirable) * Unit Testing (Desirable) * CI/CD (Desirable) | A/I |
| Experience in data engineering practices and frameworks such as:   * Querying REST APIs * Orchestration such as Airflow / CRON (Desirable) * Spark (Desirable) | A/I |
| Experience of using Azure cloud data management solutions; IaaS / PaaS (VMs, Databricks, Blob Storage) | A/I |
| Experience with big data techniques such as Hadoop, Spark or equivalent (desirable) | A/I |
| Familiarity with project management techniques and experience managing data projects | A/I |
| Experience in leading complex data projects | A/I |
| Experience in leading change to improve organisational data literacy and data maturity (desirable) | A/I |
| Experience working within the public sector (NHS, council, government) (desirable) | A/I |
| Experience working with sensitive data, taking appropriate measure to protect confidentially that is in line with legislation and organizational policy | A/I |
| **Skills** | |
| Excellent communications skills, both written and verbal. Able to convey highly complex or sensitive material. | A/I/T |
| Able to engage with partners at all levels to understand business requirements, negotiate work tasks and provide expert advice and guidance | A/I/T |
| Strong prioritization and time management skills. Ability to organise and prioritise own workload, within defined requirements for the role. | A/I/T |
| Strong desire and ability to continuously learn new software, technologies and methodologies to keep up with business needs and keep up with the fast-evolving field of big data | A/I/T |
| Highly numerate with skills in the analysis and interpretation of data | A/I/T |
| Ability to work independently and as a member of a team | A/I |
| Proficient in understanding, exploring and manipulating large and complex datasets and deal with challenges related to analyses, capture, querying, storage, transfer, retrieval and information security related to these datasets. | A/I |
| IT literary - Advance MS Excel skills, effectively use MS Word , PowerPoint, Outlook | A/I/T |
| Proficient querying data e.g. SQL Script and SQL Server | A/I/T |
| Proficient in using R and/or Python to manipulate and transform data and perform advance analytical and data science tasks | A/I/T |
| **Qualifications** | |
| Post-graduate degree or equivalent experience in data science, statistics, mathematics, computer science or related field. | A/C |

**A – Application form**

**I – Interview**

**T – Test**

**C - Certificate**