### Job Description

**Job title: Data Engineer / Analyst**

**Grade: Grade 8 Post number: GLA756**

**Directorate: Communities and Intelligence**

**Unit: Intelligence Unit Team: City Data Team**

#### Job purpose

1. To help provide high quality information and advice to inform the development of policy and service delivery by the GLA and to further develop the Intelligence Unit’s reputation as an authoritative and well-regarded source of reliable information and data on these issues.
2. An important part of the role will be to identify and experiment with new techniques as needed to support delivery of data science projects, and to share this knowledge with the team or with the public

#### Principal accountabilities

1. Support the work of the Intelligence Unit and the wider GLA by developing data pipelines for large, complex datasets to ensure reproducibility and create automated processes for transforming and updating datasets. Support other teams by accessing third party data accessing APIs using bespoke queries
2. Assist technical specialists/modellers and policy staff in understanding and translating their needs to an actionable analytical/data science projects
3. Develop and maintain well-designed and documented APIs including web mapping services to support interactive web applications and sharing data with external organisations
4. Deliver new insights for the organisation on projects with different teams across the GLA by combining multiple datasets.
5. Lead the development of a web-based, API-driven SASPAC to complement ONS tools. Define and direct enhancements to the software and ensuring an up-to-date understanding of the requirements of all users of the software.
6. Realise the benefits of London’s diversity by promoting and enabling equality of opportunities and promoting the diverse needs and aspirations of London’s communities.
7. Manage staff and resources allocated to the job in accordance with the Authority’s policies and Code of Ethics and Standards.
8. Realise the benefits of a flexible approach to work in undertaking the duties and responsibilities of this job, and participating in multi-disciplinary, cross-department and cross-organisational groups and project teams.

#### Key contacts

**accountable to:** Senior Manager – City Data

**accountable for:** Resources allocated to the job including line management of staff as required.

**Person specification**

**Technical requirements/experience/qualifications**

1. A very high level of numeracy, evidenced by a good first degree, or postgraduate level, in computer science, mathematics, or an allied subject with a high statistical content, or an ability to demonstrate an equivalent level of knowledge through experience in a relevant field.
2. Substantial experience of translating the needs of non-technical staff into actionable analytical/data science projects.
3. Good understanding of SQL and NoSQL databases (data modelling, data warehousing) and at least three years previous experience of such work in a relevant environment.
4. Evidence of clear personal, verbal and written communication skills, and of ability to communicate complex issues to a range of audiences effectively, including using data visualisation techniques
5. Ability to quickly research and learn new programming/modelling tools and techniques
6. Strong proficiency in developing algorithms using a variety of software/codebases e.g. R, Python to build reproducible processes
7. Experience with Java or equivalent desirable
8. Interest in mapping and other data visualisation tools.

**Behavioural competencies**

**BUILDING AND MANAGING RELATIONSHIPS**

… is developing rapport and working effectively with a diverse range of people, sharing knowledge and skills to deliver shared goals.

Level 2 indicators of effective performance

* Develops new professional relationships
* Understands the needs of others, the constraints they face and the levers to their engagement
* Understands differences, anticipates areas of conflict and takes action
* Fosters an environment where others feel respected
* Identifies opportunities for joint working to minimise duplication and deliver shared goals

**STAKEHOLDER FOCUS**

… is consulting with, listening to and understanding the needs of those our work impacts and using this knowledge to shape what we do and manage others’ expectations.

Level 2 indicators of effective performance

* Seeks to understand requirements, gathering extra information when needs are not clear
* Presents the GLA positively by interacting effectively with stakeholders
* Delivers a timely and accurate service
* Understands the differing needs of stakeholders and adapts own service accordingly
* Seeks and uses feedback from a variety of sources to improve the GLA’s service to Londoners

**DECISION MAKING**

… is forming sound, evidence-based judgements, making choices, assessing risks to delivery, and taking accountability for results.

Level 2 indicators of effective performance

* Takes decisions as necessary on the basis of the information available
* Makes decisions without unnecessarily referring to others
* Involves and consults internal and external stakeholders early in decisions that impact them
* Identifies potential barriers to decision making and initiates action to move a situation forward
* Demonstrates awareness of the GLA’s decision making processes and how to use them

**PLANNING AND ORGANISING**

… is thinking ahead, managing time, priorities and risk, and developing structured and efficient approaches to deliver work on time and to a high standard.

Level 2 indicators of effective performance

* Prioritises work in line with key team or project deliverables
* Makes contingency plans to account for changing work priorities, deadlines and milestones
* Identifies and consults with sponsors or stakeholders in planning work
* Pays close attention to detail, ensuring team’s work is delivered to a high standard
* Negotiates realistic timescales for work delivery, ensuring team deliverables can be met

**RESEARCH AND ANALYSIS**

… is gathering intelligence (information, opinion and data) from varied sources, making sense of it, testing its validity and drawing conclusions that can lead to practical benefits.

Level 2 indicators of effective performance

* Proactively seeks new information sources to progress research agendas and address gaps in knowledge
* Grasps limitations of or assumptions behind data sources, disregarding those that lack quality
* Analyses and integrates qualitative and quantitative data to find new insights
* Translates research outcomes into concise, meaningful reports
* Identifies relevant and practical research questions for the future

**RESPONSIBLE USE OF RESOURCES**

… is taking personal responsibility for using and managing resources effectively, efficiently and sustainably.

Level 3 indicators of effective performance

* Allocates financial and people resources efficiently to maximise value for team and wider organisation
* Thinks of terms of maximum efficiency when planning resource allocation
* Implements good practice on efficient use of resources
* Monitors financial performance and efficiency of own team, ensuring delivery of work within a budget
* Negotiates and manages contracts responsibly across a diverse supplier base

**COMMUNICATING AND INFLUENCING** … is presenting information and arguments clearly and convincingly so that others see us as credible and articulate, and engage with us.

Level 2 indicators of effective performance

* Communicates openly and inclusively with internal and external stakeholders
* Clearly articulates the key points of an argument, both in verbal and written communication
* Persuades others, using evidence based knowledge, modifying approach to deliver message effectively
* Challenges the views of others in an open and constructive way
* Presents a credible and positive image both internally and externally

**PROBLEM SOLVING**

… is analysing and interpreting situations from a variety of viewpoints and finding creative, workable and timely solutions.

Level 2 indicators of effective performance

* Processes and distils a variety of information to understand a problem fully
* Proposes options for solutions to presented problems
* Builds on the ideas of others to encourage creative problem solving
* Thinks laterally about own work, considering different ways to approach problems

Seeks the opinions and experiences of others to understand different approaches to problem solving

#### Working Patterns

None.

**Reasonable adjustment**

Reasonable adjustment will be made to working arrangements to accommodate a person with a disability who otherwise would be prevented from undertaking the work.

#### Structure chart

Structure chart to be included. Available from HR.