



Senior Data Engineer

DIRECTORATE:	Corporate Services
SECTION:	Information Technology
REPORTING TO:	Head of IT
CONTRACT:	9 months fixed term contract
SALARY:	£50,523- £53,000 per annum

OVERALL PURPOSE OF THE JOB

Diabetes UK is bringing people together to work in partnership in order to support those living with diabetes, prevent Type 2, make research breakthroughs in diabetes and ultimately, find a cure. In order to achieve this mission, effective capture, management, cleaning and enhancement of our data is essential. Over the last few years the charity has grown and with it the amount of data we process, its complexity and the number of sources data is received from. And the need for our services has never been stronger. We face unprecedented challenges in managing our data effectively and ensuring secure, prompt access can be managed across our dispersed workforce.

At the heart of our upcoming strategy lies the need to unlock our data and support organisation-wide self-service access to quality reporting. This is an opportunity to help us achieve the goals of our Data Strategy by driving forwards our programme of better data integration, modelling and surfacing through effective data warehousing to support analytics across the organisation.

This is one of two roles required to work as part of our fast-paced Better Data Programme. This role will advise on the selection and adoption of emerging technologies and tools to deliver a Modern Data platform. You will co-ordinate and mentor a team of developers to support organisation-wide ELT, data import, new master data management approach, and surface the organisational data model through data warehousing. This will be done while fostering an entrepreneurial and creative work ethic, and willingness to learn and adapt to emerging or different technologies. This role will work closely with a second Senior Data Engineer to support the delivery of the new technical analytics tools for insight leads in teams across the organisation to be able to build reports and dashboards. In turn we know this will lead to better relationships between Diabetes UK and those who benefit from our services and those dedicated to supporting our cause of working towards a world where Diabetes can do no harm.

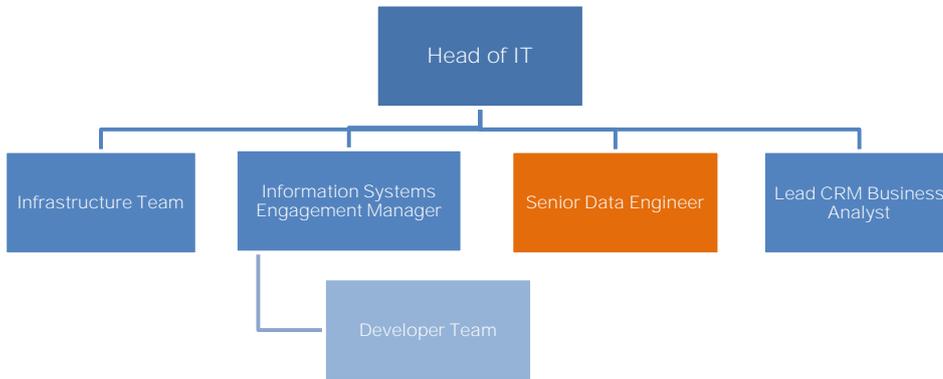
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WORKING RELATIONSHIPS:

Inside Diabetes UK
<ul style="list-style-type: none"> • Data Strategy Lead • Senior Database Engineer • Information Technology Team • Fundraising and Engagement/ Business Support Team • Digital Team including Digital Architects • Information Governance • Better Data Programme Board Members & Working Groups • Business Analysts • Project Managers • Data owners, product owners and data stewards throughout the organisation
Outside Diabetes UK
<ul style="list-style-type: none"> • Third party vendors • Managed service providers • Fulfilment agencies, Marketing agencies • Data Professionals in the charity sector and beyond

MAIN DUTIES AND RESPONSIBILITIES:

- **Technical solution design:** Guide the design and direction of the Data Strategy by leading the design and deployment of appropriate new data stacks to manage integration, exception handling, master data management, and warehousing which can support self-service analytics across the organisation. Support us to establish ways of working to be rolled out across the organisation.
- **Data modelling:** Lead the development of the organisational data model in the new technology environment using industry-recognised data modelling patterns and standards. Reverse-engineer data models from existing live systems; compare and align different data models.
- **Data analysis and synthesis.** Undertake data profiling and source system analysis and present clear insights to colleagues to support the end use of the data.
- **Metadata management:** Work with implementation partners to design an appropriate metadata repository and define changes to existing metadata repositories.
- **DevSecOps Engineering:** Work within a DevOps environment and ensure security is considered at each stage of work, from design to implementation. Work with our information governance team to develop best practice access and retention approaches to support compliance.
- **Testing:** Review requirements, specifications and define test conditions. Identify issues and risks and support implementation partners and internal developers to resolve these.

- **Problem resolution:** Diagnose and respond to problems in databases, data processes, data products and services as they occur. Establish monitoring services and identify trends to resolve problems. Determine appropriate remedies and assist with implementation of it as well as preventative measures.

PERSON SPECIFICATION:

The best person for this job will be able to:

- **Support our Data Strategy and wider strategic aims:** You understand data at a strategic level and have an awareness of how this should support strategic marketing, and engagement with beneficiaries and supporters. You are able to think strategically and adapt your approach to the needs of the organisation, turning business problems into appropriate data designs.
- **Programming and build (data engineering):** You know how to use emerging and agreed standards and tools to design, code, test, correct and document moderate-to-complex programs and scripts.
- **Database Administration and automation:** You know how to Identify, create and use unattended processes and self-updating procedures for administration and upload tasks, to reduce errors on deployments, improve reliability and increase speed of implementing changes.
- **Data modelling:** You understand the concepts and principles of data modelling and can produce relevant data models across multiple subject areas.
- **Data integration design:** You know how to select and implement the appropriate technologies to deliver resilient, scalable and future-proofed data solutions. You can work with implementation partners and internal colleagues to develop / refine specifications. You can quickly learn systems that are managed outside of IT (e.g. finance systems/events management systems) to ensure integrations meet overall business requirements.
- **Data development process:** You can design, build and test data products that are complex or large-scale. You know how to build teams to deploy and manage data integration services.
- **Metadata management:** You understand a range of tools for storing and working with metadata. You can provide oversight and advice to more inexperienced members of the team.
- **Data innovation.** You have experience with and understand the impact of emerging trends on the organisation in data tools, analysis techniques and data usage.
- **Communication skills:** You know how to communicate with technical and non-technical stakeholders as well as facilitate discussions within a multidisciplinary team, with potentially challenging dynamics. You can advocate for the team externally. You know how to manage different perspectives. You can lead and develop relationships with stakeholders across the business, to engage, challenge and influence others, including motivating others to engage with the programme.
- **Project management:** You can deliver complex projects within wider programmes of activity with high levels of dependency. Be accountable for delivery and maintenance of high-quality outputs. Effectively manage your own workload, the development team's workload, and contractors and implementation partners. Identify and resolve workload risks so delivery timelines are met.
- **Leadership:** Act as a subject matter expert, guiding and coaching other developers to ensure design, development and implementation of changes are robust and reflect best practice.

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The best person for this job will have experience in:

- Leading fast-paced deployment of data solutions in a range of settings
- Expert SQL Data Warehouse Developer with experience delivering enterprise data models, data warehousing and operational data stores, and developing data interfaces for reporting tools such as Power BI.
- Designing extract, transform and load (ETL) processes in a range of technologies e.g. SQL, Oracle Integration Cloud, established and emerging Microsoft Azure technologies Deploying data transformations, including data standardization
- Data profiling, data discovery, root cause analysis and cost-benefit analysis
- Performance monitoring and tuning
- Developing metadata management approaches, data architecture repositories and architecture modelling.
- Applying data governance and data quality principles to the full data lifecycle, ensuring data is of the right quality to enable effective processes, organisational and customer outcomes.
- Deploying agile project methodologies to manage complex projects, delivering quality outputs on time and to budget. Familiarity with applying agile working to data warehouse design.
- Managing project teams, contractors and implementation partners to ensure delivery of tasks.
- Manage third party suppliers to deliver fundamental system changes/upgrades.
- DevSecOps methodologies.
- Relational database applications
- Scripting and an understanding of Boolean logic.
- CRM within a not-for profit (includes CARE NG, Microsoft Dynamics, Salesforce.com).
- Hands on experience on Oracle/Microsoft Development Platforms (PL/SQL,T-SQL) and Excel.
- Business Process Management (BPM) applications to automate processes.
- Experience of object orientated programming, to enable bulk data manipulation and import procedures (e.g. using Java/xml, Python, R, VB, C#).

The best person for this job will have:

- A self-motivated and dynamic nature
- A focus on delivering business benefit by being driven and solutions-focussed
- A diligent approach to problem solving and issue resolution.
- A proven passion for data quality
- Strong analytical and problem solving skills
- Strong interpersonal skills
- The ability to take the lead on large/complex developments
- The ability to design solutions with an understanding of the use and impact of data, systems and IT infrastructure
- Sufficient leadership skills to manage technical colleagues to implement designs once they have been approved
- The ability to be a strong team player
- The ability to learn new skills and tasks quickly
- A working knowledge of standard IT working practices (e.g. ITIL/DevSecOps/STRIDE) CIC
- A demonstrable focus for customer satisfaction
- The ability to work independently with little supervision
- A strong drive for results while multi-tasking and working calmly under pressure to deadlines