

Job description

Job title:	Data Engineer
Reporting to:	Principal Data Analyst
Salary:	£42,754 - £48,613 p.a. (dependent upon experience) plus benefits
Hours per week	37.5 (core office hours are 9:00am – 5:30pm Monday to Friday)
Contract type:	Permanent

The Health Foundation

We are an independent charity committed to bringing about better health and health care for people in the UK.

The Health Foundation has a track record in using data to tackle real-world problems, both through our in-house programmes and the work we do to support better analytics across the health and care system. Our new Data Analytics for Better Health strategy, launched in January 2020, builds on these strengths, and has a mission to ensure that analytics and data-driven technology benefits the health of everyone in the UK.

We know that there is enormous potential to use data to improve health; indeed, it is critical to efforts to improve the quality of health and social care, develop innovations to detect disease much earlier, and prioritise interventions to where they are most needed. Yet, data-driven technology also has the potential to exacerbate health inequalities, decrease social connectedness, and increase demand on an overstretched health and social care system. The key question is: how can we make sure the impacts are positive, so that everyone's health and care benefits?

Purpose of the role

We have an opportunity for an individual with experience with a track record in building reproducible analytical pipelines and producing high-quality data products. The Data Analytics team is currently working on four analytical research themes to address key challenges in health and social care: strengthening social care analytics; tackling health inequalities; accelerating service change; and improving health stock. You will have the opportunity to work across these themes to fulfil the objectives of the Data Analytics for Better Health Strategy and to work collaboratively with teams across the Health Foundation.

You will be responsible for finding effective, reproducible solutions to generate analysis-ready data, as well as tools and data products that can be leveraged by teams across the Health Foundation. You will also be responsible for the design, coding, testing and documentation of tools and data products, often working to tight timescales.

The post will require expertise in common data science programming languages, ideally R and Python, and experience in solving data challenges in an efficient and reproducible manner. You will collaborate with colleagues across teams to provide expertise and to deliver joint projects and you will be expected to manage the work of contractors as required. You will be expected to communicate your work to a high standard to a range of audiences and to disseminate learning and technical developments.

Key tasks and responsibilities

Lead the design, development and dissemination of data products.

1. Work in a consultative manner with senior team members and colleagues to develop and shape innovative projects, making the best use of available data sets to fulfil the strategic objectives of the team.
2. Work with the Principal Data Analyst to design data products and take a lead role in coding, testing and documentation of data products.
3. Develop and maintain data pipelines to capture, integrate and update datasets from multiple disparate sources.
4. Provide quick and reliable access to the combined, standardised data for data scientists/analysts.
5. Work with the data managers to ensure that data is stored and structured in a manner than enables it to be cleaned and processed effectively for the purposes of data products.
6. Develop appropriate and effective technical solutions tailored to different projects and provide technical mentorship for colleagues on their implementation and use as required.
7. Work with the Principal Data Analyst to develop approaches and timelines and coordinate multiple aspects of work to meet agreed timelines.
8. Effectively communicate with all stakeholders to document issues and requirements and to respond to queries.
9. Promote an open approach to development and analysis by publishing code online and preparing sharable documentation.
10. Contribute towards the analysis of data sets and the writing of reports and research articles as required.

Work with data analytics colleagues to support the objectives of the data analytics directorate

1. Work with colleagues across the data analytics directorate to contribute to achieve the vision of the team.
2. Provide training and technical mentorship to colleagues.

Wider contribution

As with other staff at the Foundation, the postholder will be expected to contribute to corporate activities and initiatives, such as staff meetings, cross-Foundation leadership and development programmes and other corporate projects as necessary.

The postholder will similarly be expected to play a role in supporting and helping to develop the Data Analytics team to enable it to improve its effectiveness. The postholder will also be expected to show active initiative in developing their professional expertise.

The post holder will at all times aim to embed our key behaviours – Commitment to Diversity and Inclusion, Working together, Achieving impact, Discovering and learning – in all aspects of their day to day delivery in the role.

Person specification

	Criteria	Assessment (CV/SS-Shortlist, T-Test, I-Interview)	E/D
Behaviour	Commitment to Diversity and Inclusion - A commitment to diversity and inclusion in employment and service delivery.	I	E
Behaviour	Working together - A person who works collaboratively and is able to work successfully work across teams (both internally and externally) in a consultative manner.	I	E
Behaviour	Achieving impact – Ability to work as part of a team towards a common mission, with an appetite and drive to ensure data and data-driven technology improves health in the UK.	I	E
Behaviour	Discovering and Learning – A person with an active interest in the work of their colleagues and a commitment to developing their domain knowledge. An ability to learn from successes, challenges and mistakes.	I	E
Education	Relevant degree with substantial quantitative or advanced programming component, or evidence of equivalent knowledge and experience gained through career development.	CV/SS	E
Experience	An interest in health care and experience of working with major datasets in health and ideally social care.	CV/SS, I	D
Experience	Evidence of experience of working across teams in a consultative manner.	CV/SS, I	E
Experience	Familiarity with best practice in agile software development.	CV/SS, I	E
Experience	Experience in a range of data science practices.	CV/SS, I	E
Knowledge	An understanding of the data governance requirements that exist in the UK, as well as data security.	CV/SS, I	D
Skills and abilities	Evidence of the ability to work independently with good organisation skills and the ability to work on multiple projects and prioritise their work.	CV/SS, I	E
Skills and abilities	Ability to work flexibly in order to respond to changing priorities, with a solution orientated way of working, and ability to adapt and persevere following setbacks.	CV/SS, I	E
Skills and abilities	Good knowledge of R and Python, ability to write high quality code.	CV/SS, I	E
Skills and abilities	Expert knowledge of methods in data manipulation and data wrangling	CV/SS, I	E
Skills and abilities	Experience with version control (git) and code review	CV/SS, I	E
Skills and abilities	Ability to make large complex datasets more accessible through developing user-friendly software or with data visualisation tools	CV/SS, I	D

Skills and abilities	Evidence of the ability to communicate, both verbally and in writing, clearly and concisely for a range of audiences, to time limited deadlines.	CV/SS, I	D
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