

## Health Data Research UK

### Applicant Pack

#### Job description and person specification

<b>Post:</b>	Lead Software Engineer and Manager for HDR UK Innovation Gateway
<b>Location:</b>	Flexible
<b>Salary:</b>	£92,000
<b>Reporting to:</b>	CTO
<b>Contract:</b>	Full Time Role, Permanent

#### About Health Data Research UK

HDR UK is the UK's national institute for health data science, supported by nine funders including the Medical Research Council, Wellcome, the National Institute for Health Research and the British Heart Foundation. Our large and expanding UK-wide network of experts develops and applies cutting-edge data science approaches to clinical, biological, genomic and other multi-dimensional health data to address the most pressing health research challenges facing society.

Our mission is to unite the UK's health data to enable discoveries that improve people's lives through data science research and innovation.

Established in 2018, HDR UK is a UK based charity working across the health research sector to bring together the UK's unique data assets and specialists across academia, research and healthcare to unlock knowledge and deliver insights. By undertaking research at scale, across a population of up to 65 million people, we have an unrivalled opportunity to use data to the highest ethical standards to drive breakthroughs in medical research. This unleashes the potential to improve the way we are able to prevent, detect and diagnose diseases such as cancer, heart disease and asthma.

At Health Data Research UK, we employ talented individuals who bring their own unique skills and experience to support the vision and benefit the whole team.

We have been central to the UK's response to COVID-19, enabling a trustworthy, national approach to using health data, drawing on the full capabilities of UK research, enabling health data for research into understanding the virus, clinical trials for treatments (including Dexamethasone), symptom trackers, risk calculators and impacts on vulnerable groups, including cancer patients.

## Purpose of the post

HDR UK requires the services of an experienced Lead Software Engineer and Manager to lead development of the next phase of its flagship Innovation Gateway ( [www.healthdatagateway.org](http://www.healthdatagateway.org) ) and associated services and APIs.

The Innovation Gateway was released in May 2020 and provides a key resource to discover and access health data resources for researchers and data custodians. Its primary function is providing visibility to and supporting access requests for data sets by researchers in the UK and around the globe to health data that can support them in their quest to deliver scientific insights, that improve health and healthcare of the UK and worldwide populations.

The Gateway today holds information on over 750 data sets which researchers can securely request access to and is supported by over 60 data custodians across the UK and the globe.

These data sets have supported the publication of over 1,900 impactful papers at the cutting edge of scientific and medical discoveries.

The Gateway has been a critical deliverable in HDR UK's first quinquennium (5 years) and we are really looking to scale up as we look forward into the future to support 1,000's of researchers on a global basis discovery and gain access to data in a trustworthy and secure fashion, enabling discoveries that improve people's lives.

The successful candidate will be expected to provide individual contribution as a full stack developer and to manage and lead the Gateway agile software development and support team, providing guidance on day-to-day activities and supporting the developers in both line management tasks, development processes, code review & quality, plus hands-on development as required.

### Main Responsibilities:

- Development Team Management:
  - Line and career management of the development team
  - Working closely with the Product Owner, Stakeholders, Architect and Scrum Master
  - Mentoring software developers including on technical career progress
  - Working to provide key technical decision guidance in conjunction with the Chief Architect
  - Leadership responsibility for scoring & sizing stories as part of fortnightly sprint planning
  - Implementation of open codebase development, build and release management processes for the Innovation Gateway working with our partners and the health data software development community
  - Working with external software development partners to improve resiliency of HDR's development organisation
  
- Lead Software Development aspects:
  - Lead software full stack developer for a single scrum team

- Developing all different aspects of the Gateway including Search, Content Management, APIs, Visualisations and Integrations
- Working to an agile methodology
- Working in fortnightly sprints
- Documenting code and solutions, including running code reviews for the team and maintaining high quality code and guidelines
- Troubleshooting and supporting development issues as they arise working with the team

## **Continuous Improvement:**

HDR UK is dedicated to continuous improvement through our quality management system and demonstrated by our commitment to achieve ISO 9001 accreditation. The post-holder will review, analyse, identify and implement opportunities for quality improvement within their specialism and as part of the wider team through our strategy development and internal audit processes.

## **Key contacts / relationships:**

The successful candidate will need to work collaboratively across the Innovation Gateway internal team: Chief Product Owner, Product Architect, Scrum Master, Business Analysts and Test Lead and also stakeholders across HDR UK more broadly. Also to collaborate externally with 3<sup>rd</sup> party system integrators, software vendors, partners, infrastructure providers and end-users.

## **Knowledge, skills and experience**

### **Essential:**

- Demonstrable experience managing and leading an agile / scrum software development team including CI/CD
- Comfortable operating across national teams and different strategic initiatives (i.e. science and technology)
- Experience working with multi-national development partners to achieve product delivery
- Open source development projects and processes
- Experience using Confluence, JIRA, Trello and similar Agile project management tools
- Coaching members of a technical team
- Proficient in English
- 2+ years experience working with React, Node.js, MongoDB
- 5+ years full stack software development experience.

### **Desirable:**



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- An understanding of health data research delivery within the public sector, academia and/or industry
- Google Cloud Platform experience/certification
- MongoDB knowledge
- PHP, Python knowledge
- Kubernetes, Jenkins, Docker

## Dimensions

- This is a full-time 5 day per week role
- This role is home-based, however you will be required from time to time to work at other premises or sites, but this is not expected to exceed one day of travel per week

## Application Process

Please apply through our online recruitment platform. You will also be asked to upload a short covering letter and CV. Please upload this as one document.

If you have any queries please contact [recruitment@hdruk.ac.uk](mailto:recruitment@hdruk.ac.uk)

## HDR UK's values

HDR UK's values guide how we work together within HDR UK and with our partners and other stakeholders:

1. **Transparency:** we will share information, insights and innovations so that we learn faster together.
2. **Optimism:** we believe that we can make things better, that we can do things differently and that we can overcome challenges to create a new and thriving health data ecosystem that benefits patients and the public, the NHS, scientific discovery and industry.
3. **Respect:** we deliver better results when we work in a truly interdisciplinary way. We listen, share and respect a diversity of thought and opinion, perspective and experience. We are inclusive - leveraging and fairly attributing the expertise and capabilities of others.
4. **Courage:** we are leading the way and will be prepared to try new things, take risks, embrace ambiguity and challenge the status quo. We will contribute opinions to shape the future of health data research.
5. **Humility:** we have a lot to learn from others; and aim to be free from pride and arrogance.

## Equal Opportunities Policy Statement

Health Data Research UK is an equal opportunities employer, and as such aims to treat all employees, consultants and applicants fairly. It is our policy to provide employment equality to all, irrespective of:

- Gender, including gender reassignment
- Marital or civil partnership status
- Having or not having dependants
- Religion or belief
- Race (including colour, nationality, ethnic or national origins)
- Disability
- Sexual orientation
- Age

We are opposed to all forms of unlawful and unfair discrimination. All job applicants and employees who work for us will be treated fairly and will not be unfairly discriminated against on any of the above grounds. Decisions about recruitment and selection, promotion, training or any other benefit will be made objectively and without unlawful discrimination. Our diversity and inclusion policy is [here](#).