



Health Data Insight C.I.C.
CPC4, Capital Park
Fulbourn
Cambridge
CB21 5XE

Job title: Senior Software Developer
Accountable to: Lead Software Developer
Hours: Full-time (37.5 hours per week)
Job type: 2 years fixed term (in the first instance)
Base/location: Capital Park, Cambridge, UK
Salary: £38,000 - £45,000 depending upon experience

Job summary

We are looking for a talented and driven individual to join our team to help support the use of cancer data by scientists involved in cancer research. We are experts in finding and joining up complex healthcare data and we use this to gain insight and an understanding of how care is delivered. This role focuses on data manipulation and developing software tools to help present and visualise information in an accessible and stimulating way to patients and a range of customers within the NHS, local government, charities and industry.

Projects currently underway include the National Cancer Diagnosis Audit (NCDA) portal and the BRCA Challenge Project. The NCDA investigates the diagnostic pathways for cancer patients. The BRCA Challenge is establishing a national hereditary cancer register using genetic testing data from molecular laboratories.

The successful candidate will work with a developer and technical architect within the National Cancer Registration Service (part of Public Health England) to support the development and maintainence of these and future web applications.

You will need to be proficient in web development and object-oriented programming. A strong knowledge of computer security is essential. System administration experience would be an advantage. You will also need to contribute to the operational management of projects and on-going development, defining and prioritising requirements from a technical perspective.

Main responsibilities and skills

This is an exciting opportunity to join a small team working on pioneering initiatives using big data in healthcare.

Key responsibilities:

- Core software developer for the cancer patient information portal infrastructure.
- Write and maintain code to deliver secure access to clinical data.
- Contribute to requirements development, working with business analysts as required.
- Create and run unit and integration tests.
- Implement security testing and system resilience.

- Ensure code documentation.
- Deploy software to production environment and contribute to operational management of the service.
- Work with the tech lead, dev ops and lead architect to refine the technical approach

Essential key skills:

- Ruby
- Rails
- HTML / CSS & some Javascript
- TDD / BDD experience
- Comfortable at the *nix command line (Linux, OSX, AIX, Solaris etc)

Advantageous key skills:

- Minitest
- Solid Rails 5/6 experience in a commercial environment
- Knowledge of security engineering or previous experience developing systems where confidentiality is a critical requirement
- OAuth
- Experience building and consuming APIs
- Experience working with cloud services including AWS
- SysAdmin / Deployment experience (Capistrano, Rake etc)
- PostgreSQL MySQL, NoSQL or other database experience
- jQuery / Jasmine
- Experience working in an agile environment (eg. Scrum, Kanban or XP)
- Experience with technical practices such as pair programming, collective code ownership and continuous integration
- Version Control / GIT
- A good computer science degree
- Scaling experience
- Experience working within a tech startup or a technical role within a corporate environment.

Person Specification:

- Willingness and demonstrated ability to learn new technologies and techniques where needed.
- Able to work as part of a small team, assisting with other team members work as required, and maintaining an awareness of how your work fits into the wider project.
- Self-motivated to manage own workload and produce high quality outputs with limited supervision.
- Able to produce clear and concise documentation and comfortable in programming to corporate coding standards.
- Able to identify potential problems and act to resolve or highlight these.

Health Data Insight C.I.C

HDI is a social enterprise overseen by the [Office of the Regulator of Community Interest Companies](#) which ensures we meet our social purpose and that the value we create is protected and used for social good.

Our aim is to:

- create value for public sector organisations by finding new knowledge from both existing and new sources of information
- provide a data management and linkage service that allows partners to access information in safe-havens that guarantee the privacy of each individual patient.
- create visual, internet-based information services and applications that can be easily accessed, used and understood
- supply organisations with information and services that they can use to understand and help improve their services
- inform patients to enhance their selection, access and use of healthcare services and improve their understanding of their clinical condition and care.

Our strategic objectives are aligned to NHS and wider government policy to improve transparency and access to data, encourage self-management, enable choice and foster the use of social enterprises to deliver public services.

The National Cancer Registration and Analysis Service (NCRAS)

The National Cancer Registration and Analysis Service (NCRAS), which is within Public Health England (PHE), provides intelligence to drive improvement in standards of cancer care and clinical outcomes. This is facilitated through a series of work programmes, utilising the healthcare data and information collected about cancer patients by multiple specialist organisations and collated within PHE. The NCRAS builds on the work of partner organisations and teams to develop world class cancer intelligence for PHE, partners – nationally and internationally - and the local public health system.

The NCRAS leads on sharing high quality intelligence, knowledge, evidence and expertise to support the needs of stakeholders. It produces analyses, toolkits and reports which span both the Public Health and NHS agenda. New analyses include the number of people living with cancer, how outcomes vary between different patient groups and by stage at diagnosis, and an insight into cancer equality metrics.

The NCRAS consists of cancer registration and intelligence teams in nine offices across PHE. Each team will have national and local responsibilities and functions and will work closely with PHE colleagues in other divisions, directorates, centres and regions.

HDI – PHE Partnership

HDI has a Partnership Agreement with PHE. The focus of the partnerships between Public Health England's (PHE) National Disease Registration Service (NDRS) and external organisations is to improve health outcomes using the real-world data collected by the National Disease Registration Service. These collaborative arrangements exist to support the development and application of innovative approaches and statistical techniques to the collection, quality assurance, data linkages and analyses of registry data. They are formed when an area that is deemed of significant benefit to patients is identified by both parties and when neither organisation would otherwise be able to progress individually.