



Position Details

Research Projects- CSOF6

THE FOLLOWING INFORMATION IS FOR APPLICANTS	
Advertised Job Title	Software Engineer - FHIR
Job Reference	96937
Tenure	Specified Term of 2 years Full-time
Salary Range	AU\$126,313 - AU\$148,014per annum (pro-rata for part-time) plus up to 15.4% superannuation
Location(s)	Brisbane QLD (preferred), Sydney NSW, Canberra ACT, Melbourne VIC
Relocation Assistance	Will be provided to the successful candidate if required
Applications are open to	Australian/New Zealand Citizens and Australian Permanent Residents
Position reports to the	Team Leader
Client Focus – Internal	80%
Client Focus – External	20%
Number of Direct Reports	0
Enquire about this job	Contact Danielle Tavares-Rixon via email at Danielle.Tavares-Rixon@csiro.au
How to apply	Apply online at https://jobs.csiro.au/ Internal applicants please apply via Jobs Central If you experience difficulties when applying, please email careers.online@csiro.au or call 1300 984 220.

Acknowledgement of Country

CSIRO acknowledges the Traditional Owners of the land, sea and waters, of the areas that we live and work on across Australia. We acknowledge their continuing connection to their culture and pay our respects to their Elders past and present. View our [vision towards reconciliation](#).

Child Safety

CSIRO is committed to the safety and wellbeing of all children and young people involved in our activities and programs. View our [Child Safe Policy](#).

Role Overview

The Australian e-Health Research Centre (AEHRC) is CSIRO's national digital health research program. We're championing the digital delivery of healthcare enabled by world-leading digital research and innovation, industry partnerships, community connections, and national trust. We're a dedicated and committed team, passionate about transforming the health of Australians. You'll find some of our health and biomedical informatics research:

- Delivered through virtual care to monitor health remotely;
- Informing evidence-based digital health solutions; or
- Transforming the efficiency of hospital and health systems – nationally and internationally.

With over 100 scientists and engineers across Brisbane, Sydney, Melbourne, Canberra and Perth, the AEHRC is Australia's largest digital health research program.

The unparalleled demands of COVID-19 have been a catalyst for increased focus on digitisation and innovation in health. CSIRO, via the AEHRC, is leading a national agenda focused on innovation to foster continued transformation and sustainable healthcare delivery practices. We're hiring a number of talented researchers and leaders to contribute to this significant objective.

The Software Engineer will join the FHIR Accelerator team in the Australian e-Health Research Centre (AEHRC). The position will involve working closely with the AEHRC team, along with other collaborators and stakeholders in the creation, development, management and support of open data exchange standards and capabilities to meet the current and future needs for Australia's health system.

The successful candidate will use contemporary open-source products and cloud technologies to design, create, develop and maintain code to support FHIR Accelerator standards and reference services. Working as part of the FHIR Accelerator team, this role's primary focus is driving standards implementation support for an AU Core FHIR standard and associated materials throughout a community-led process.

This role will also support other HL7 AU standards, data standards, clinical terminology, and project tasks as needed. The role will contribute to the Australian FHIR Community Process, support piloting and implementation of standards, as well as generating and contributing ideas for further research.

Duties and Key Result Areas

- Work with clients and CSIRO researchers and software engineers to lead projects in developing FHIR software and solutions to deliver high-impact solutions within the area of integration, reference implementation of ... and analysis of clinical and other health data.
- Develop and maintain high quality software in accordance with industry best practice and organisational guidelines.
- Contribute to the management and administration of operational business systems, web sites and associated infrastructure.
- Communication of project outcomes through support documentation, demonstrations and presentations.
- Help build CSIRO's research and engineering reputation for integrated and multi-disciplinary science related to health data semantics.
- Communicate effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO's reputation.
- Work with CSIRO Business Development staff to identify commercial opportunities for software and products developed as part of projects.
- Adhere to, promote and encourage the spirit and practice of CSIRO's Values, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.

Selection Criteria

Essential

Under CSIRO policy only those who meet all essential criteria can be appointed.

1. Tertiary qualifications in a relevant discipline such as Computer Science or equivalent field work experience in the area health data engineering,
2. Knowledge of scripting languages such as Python, Swift, JavaScript, or Shell.
3. Experience developing and managing software in a cloud environment, such as AWS, GCP, Azure or OpenStack
4. Experience with Configuration management or infrastructure as code tools, such as Helm, Ansible, Terraform, CloudFormation, Puppet or Chef
5. Ability to work independently and efficiently to meet deadlines as well as working cooperatively with others in a high functioning team to meet team objectives.
6. Demonstrated experience building and maintaining strong professional and collaborative working relationships.
7. Ability to conduct functional testing to ensure reference implementations behave as expected according to the conformance requirements on the data structure, terminology, and RESTful interactions defined in the FHIR specification.
8. Ability to undertake QA review and contribute to the continuous improvement of a test harness based on lessons learnt, emerging requirements, advancing test methodologies and technologies.
9. Ability to configure automated build and deployment pipelines to integrate testing with the development workflow.
10. Ability to work with the team to establish mechanisms for managing test data and environments required for testing.
11. Collaborate to develop and implement reporting mechanisms for test result capture and analysis, and generate test reports encompassing test coverage and traceability.
12. Ability to develop and maintain API conformance testing applications.
13. Proficiency in object-oriented programming.
14. Ability to generate synthetic test data sets for various healthcare-related scenarios using programmatic automation.
15. Ability to engage and support the implementer community in using the testing tools.
16. Ability to participate in design reviews, stand-ups, and planning meetings and support the coordinating and running of Sprint events.

Desirable

1. Experience with the HL7 FHIR standard.
2. Git experience is preferred.
3. Experience designing software interfaces and APIs
4. Experience working on mobile automation, app development, or iOS development.
5. Experience with front end technologies e.g. React, Vue.js, Knockout, or Angular.
6. Experience with Ruby.

Required Competencies

- **Teamwork and Collaboration:** Cooperates with others to achieve organisational objectives and may share team resources in order to do this. Collaborates with other team as well as industry colleagues.
- **Influence and Communication:** Identifies critical stakeholders and influences them via an influential third party, for example through an established network, to gain support for sometimes contentious, proposals / ideas.
- **Resource Management/Leadership:** Sets up and maintains effective and efficient work teams and manages performance and resources, to achieve objectives. Chooses appropriate management strategies and communication styles to maintain high levels of motivation and productivity. Gives feedback for development purposes and provides support and direction for improvement.
- **Judgement and Problem Solving:** Anticipates and manages problems in ambiguous situations. Develops and selects an appropriate course of action and provides for contingencies. Evaluates, interprets and integrates complex bodies of information and draws logical conclusions, synthesises proposals and defends options with reasoned arguments.
- **Independence:** Assesses the risk and opportunity of identified strategies, options and actions. Overcomes problems and setbacks in achieving goals. Invariably includes consideration of value-added future impact on bottom line when determining the optimal and efficient use of resources.
- **Adaptability:** Demonstrates flexibility in thinking and adapts to and manages the increasing rate of organisational change by adjusting strategies, goals and priorities.

Special Requirements

Appointment to this role may be subject to conditions including provision of a national police check as well as other security/medical/character clearance requirements.

- The successful candidate will be asked to obtain and provide evidence of a National Police Clearance or equivalent. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.

About CSIRO

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](#) for more information.

CSIRO is a values-based organisation. In your application and at interview you will need to demonstrate behaviours aligned to our values of:

- People First
- Further Together
- Making it Real
- Trusted