# Position Details

## Technical Services- CSOF5

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| The following information is for applicants | |
| Advertised Job Title | Software Engineer, Scientific Data Systems |
| Job Reference | 71239 |
| Tenure | Indefinite  Full-time |
| Salary Range | AU$98,735 to AU$106,848 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Hobart, TAS |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian/New Zealand Citizens and Australian Permanent Residents Only |
| Position reports to the | Team Leader, Information and Data Centre |
| Client Focus – Internal | 80% |
| Client Focus – External | 20% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Pamela Brodie via email: pamela.brodie@csiro.au or phone: 03 6232 5556 |
| 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](mailto:careers.online@csiro.au) or call 1300 984 220. |

### Role Overview

The role of Technical Staff in CSIRO is to provide support for scientific research in a diverse range of laboratory and field situations across a range of different research projects. This support consists of the application of accepted technical practices and the development of new practices. The work is usually carried out as a member of a centralised service.

The Software Engineer, Information and Data Centre (IDC) is a technical leadership role with responsibilities for the planning and execution of future data science and publication platforms for the Marine National Facility (MNF).

The role will work in the Scientific Data Systems (SDS) Group, which is part of the Engineering and Technology Program within CSIRO National Collections and Marine Infrastructure (NCMI). At NCMI, we manage MNF data from the Research Vessel Investigator, infrastructure and biological collections for the benefit of research and industry.

Working in a diverse team, the Software Engineer will develop, deploy and maintain innovative web tools and systems for the curation, description and dissemination of scientific data.

### This role may include seagoing duties, if operationally required.

### Duties and Key Result Areas:

* Create innovative products and services to increase the usability of MNF and other scientific data sets.
* Design, develop, deploy and maintain web-based data systems, services and tools for the management and visualisation of a wide range of scientific data, adding value to the data collections.
* Use software engineering best-practices, such as version control, continuous integration, automated test suites and work item tracking software during daily activities.
* Liaise with key stakeholders within CSIRO, nationally and internationally. This would include working with data providers and recipients, server providers, standards bodies and other experts concerning technical aspects of data interoperability, collection, processing, metadata, publication and archiving.
* Communicate openly, effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Work collaboratively as part of a multi-disciplinary, often regionally dispersed research team, and business unit to carry out tasks in support of CSIRO scientific objectives.
* Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Making Safety Personal goals.
* Other duties as directed.

## **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 teams as well as industry colleagues.
* **Influence and Communication:** Uses knowledge of other party's priorities and adapts presentations or discussions to appeal to the interests and level of the audience. Anticipates and prepares for others reactions.
* **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:** Investigates underlying issues of complex and ill-defined problems and develops appropriate response by adapting/creating and testing alternative solutions.
* **Independence:** Plans, sets and works to meet challenging standards and goals for self and/or others. Recognises where endeavours will make the most impact or difference, decides on desired outcome and sets realistic goals to reach this target.
* **Adaptability:**Copes with ambiguity or situations that lack clarity. Adapts readily to changing circumstances and new responsibilities (which may include activities outside own preferences) in the interests of achieving team objectives. Recognises the need for and undertakes personal development as a result of changes.

## **Selection Criteria**

#### Essential

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

1. Tertiary qualification in Information Technology or a related scientific field and/or equivalent relevant experience.
2. Demonstrated ability to contribute to, and where appropriate, provide leadership in technological decision-making processes, process improvement and software development tasks.
3. Experience applying software engineering best-practices, such as version control, continuous integration, automated test suites and work item tracking software.
4. Demonstrated computing skills as follows:
   1. The ability to develop software in modern languages (e.g. Python).
   2. Experience with frameworks, libraries and languages relevant to the development of data systems and web-based applications.
   3. Windows/Linux system administration.
5. Demonstrated ability to plan for and deliver impact, effectively guiding and delivering projects within a multi-disciplinary, regionally dispersed team in support of scientific research goals.
6. Demonstrate effective communication skills including the ability to articulate technical concepts to a diverse range of clients.

## **Desirable:**

1. Experience of DevOps technologies including CICD and container orchestration for use in production systems.
2. Previous experience developing software applications for scientific domains. An understanding the principles of scientific data management including the development and use of controlled vocabularies, standard data formats, metadata, data archiving and publication.
3. An interest in working with biological data, imagery and Machine Learning.
4. Familiarity with common geospatial tools, formats, standards and publishing OGC compliant web services.
5. Database experience (e.g. Oracle, Postgres or equivalent).

Special Requirements

* The successful candidate will be asked to obtain and provide evidence of a National Police Check or equivalent. Please note that people with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.
* The appointee to this role must have the ability and willingness to obtain an MNF remote medical clearance and a Marine Security Identification Card.

## **About CSIRO:**

We solve the greatest challenges through innovative science and technology. To find out more visit us [online](http://www.csiro.au/)!

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