# Position Details

## Research Projects- CSOF4

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| The following information is for applicants | |
| Advertised Job Title | Software Engineer |
| Job Reference | 73813 |
| Tenure | Indefinite  Full-time |
| Salary Range | AU$85,361 to AU$96,573 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | * Newcastle, NSW |
| 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 |
| Client Focus – Internal | 50% |
| Client Focus – External | 50% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Stephen Lindsay via email at stephen.lindsay@csiro.au or phone +61 2 4960 6104 |
| 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 Research Projects staff in CSIRO is to collaborate in scientific and technological activities with other research staff usually by assisting with detailed planning, undertaking or assisting with experimental, observational or technology development work, and in carrying out the more practical aspects of the work.

As part of CSIRO Energy, the Software Engineer will join a team of scientists and engineers in who design, build and deliver research and technologies that drive down greenhouse gas emissions, maximise the uptake of renewables, and reduce the cost of energy for Australians. The position will work on projects where we:

* Translate our research into software that addresses real-world challenges for Australia’s energy network, and,
* Develop data solutions that help CSIRO inform the future of policy, planning and investment in the energy sector.

Based at the CSIRO Energy Centre at Newcastle, the role will be working in Australia's national science agency, interacting with some of Australia's largest industries, meeting with researchers and scientists from around the world, and delivering practical solutions to challenging, complex and rewarding problems.

### Duties and Key Result Areas

* Under general direction, contribute to research and/or technology through the development of original and adapted experimental methods, equipment or software.
* Work in a team of engineers and research scientists developing the next generation of software systems and technologies that will help Australia successfully navigate the Energy Transition.
* With guidance from senior engineers, work with stakeholders to understand system requirements, develop and test software solutions, and provide system support as required.
* Develop and document software that is used by our researchers and our external clients.
* Show initiative to seek new approaches to meet experimental or technological needs when encountering new problems where methods are not defined.
* Participate in the identification and definition of research and/or technological problems with colleagues.
* Liaise with clients to determine their needs and take personal responsibility for their satisfaction.
* Address problems promptly and in a constructive manner.
* Participate in planning projects and accept responsibility for scheduling and completion of major parts of the project, including evaluation of options, experimental design, data collection and analysis, user and customer research, user experience and/or software design, implementation and delivery.
* Make significant contributions to the interpretation and communication of research or technological results and may collaborate on drafting presentations to, and/or detailed written reports for, clients and the scientific and/or technology community.
* Maintain confidentiality when working with commercially sensitive information.
* 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, regionally dispersed research team to carry out tasks in support of CSIRO’s scientific objectives.
* Adhere to the spirit and practice of CSIRO’s Values, 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:** Allocates activities, directs tasks and manages resources to meet objectives. Provides coaching and on the job training, recognises and supports staff achievements and fosters open communication in the team.
* **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:** Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).
* **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. A qualification in a relevant area or equivalent relevant work experience in software engineering or related discipline.
2. Expertise with two or more of the following programming languages/platforms: Python, Java, C#, Julia or client-side web technologies (HTML, CSS, JavaScript).
3. Familiarity with relational and/or non-relational databases, server-side programming and Linux.
4. Familiarity with modern software engineering tools and practices, including the use of version control systems, issue tracking, CI/CD, documentation, deployment, and modern testing tools/methodologies**.**
5. Good oral and written communication skills.
6. Proven ability to work collaboratively as part of a multi-disciplinary team and carry out tasks successfully in support of project goals.

## **Desirable**

1. Experience with the following would be considered favourably: REST, React, R, SQL, Docker, Cloud environments like AWS and Azure.
2. Experience with Data Science and/or Engineering: working with large datasets (cleaning, preparation, linking, translating, maintaining), machine learning and/or statistics, graph/network modelling.
3. Enthusiasm for improving energy efficiency, reducing the greenhouse-gas impact of energy systems, and maximising the performance of the Australian electricity grid*.*

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 Check or equivalent. Please note that people with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.

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

* 1. People First
  2. Further Together
  3. Making it Real
  4. Trusted

Find out more about CSIRO [Energy](https://www.csiro.au/en/Research/EF)