# Position Details

## Research Scientist/Engineer- CSOF6

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| The following information is for applicants | |
| Advertised Job Title | Research Scientist/ Engineer |
| Job Reference | 78847 |
| Tenure | Indefinite, Full-time |
| Salary Range | AU$102,724\_ to AU$138,176 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Kensington, Western Australia |
| 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, Remote Sensing and Image Integration Team |
| Client Focus – Internal | 70% |
| Client Focus – External | 30% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Dr. Peter Caccetta via email at Peter.Caccetta@csiro.au or phone +61 8 9333 6188 |
| 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 Scientist Staff in CSIRO is to conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. You may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. You will have the opportunity to build and maintain networks, play a lead role in securing project funds, provide scientific leadership and pursue new ideas and approaches that create new concepts.

The successful applicant will develop models and methods for the integration and analysis of multiple resolution data and computationally efficient algorithms and mapping the models onto suitable computation platforms and hardware. The research will include working on developing deep learning algorithms and workflows using CSIRO's most advanced GPU supercomputing resources with massive earth observation data to produce monitoring information at real world scales.

### Duties and Key Result Areas:

• Developing new models and methods for the analysis of spatial and temporal data, and testing prototype models.

• Under limited direction, assisting in the planning and preparation of research proposals and carrying out research investigations, requiring originality, creativity and innovation.

• Presenting results in a meaningful format, preparing reports for clients and/or writing scientific papers for publication.

• Facilitating technology transfer to third parties through specifying and implementing operational methodologies.

• Communicating openly, effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.

• Working collaboratively as part of a multi-disciplinary, often regionally dispersed research team, and business unit to carry out tasks in support of CSIRO’s 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.

## **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:** 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, goal and priorities.

## **Selection Criteria**

#### Essential

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

1. A PhD in either Mathematics, Statistics, Physics, Engineering, Computer Science or equivalent.
2. Experience developing and implementing Deep Learning algorithms.
3. The ability to work effectively as part of a multi-disciplinary, regionally dispersed research team, plus the motivation and discipline to carry out autonomous research.
4. A record of science innovation and creativity, plus the ability and willingness to incorporate novel ideas and approaches into scientific investigations.

## **Desirable:**

1. Development experience using High Performance Computing tools and resources.
2. Knowledge of Earth Observation and Satellite Remote Sensing principles
3. Familiarity with Computer Vision and Image Processing algorithms

## **About CSIRO:**

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