# Position Details

## Technical Services- CSOF5

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| The following information is for applicants | |
| Advertised Job Title | Scientific Computing Specialist - Machine Learning |
| Job Reference | 70287 |
| 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) | Canberra ACT, Clayton VIC, or Eveleigh NSW preferred. Other locations may be considered. |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian Citizens Only |
| Position reports to the | Data Analytics and Visualisation Manager, Scientific Computing |
| Client Focus – Internal | 100% |
| Client Focus – External | 0% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact [justin.baker@csiro.au](mailto:justin.baker@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](mailto:careers.online@csiro.au) or call 1300 984 220. |

### Role Overview

The Scientific Computing (SC) group within the Information Management & Technology function provides end-to-end infrastructure ranging from generic corporate IT systems through to leading-edge High-Performance data processing tools and platforms. The teams manage over 30PB of data at a compounded annual growth rate of ~75%, and a proportionate computational and network fabric including several Top500 supercomputers, HPC Cloud and a highly versatile and robust corporate hosting platform. Additional services include advanced visualisation, data processing, application support, software delivery, and research software engineering. The capability is highly customer focussed and operates closely in partnership with all areas of CSIRO research.

The Scientific Computing Services group is seeking an additional staff member to meet the needs of users by providing programming support for their computational and data intensive workflows. Under direction from the Machine Learning Technical Leader and Scientific Computing Services Team Leaders, the successful candidate will plan and deliver machine learning capabilities to the organisation.

This is an opportunity to work in a professional and technically challenging environment, supporting a diverse range of applications, to further the use of computation in science discovery.

### Work may be required at other CSIRO sites within Australia.

### Duties and Key Result Areas:

* Provide applications support services – focusing on machine learning - as part of the Data Analytics and Visualisation Team. Work activities are expected to cover both computer and data storage systems, and include:
  + Development of applications and workflows using machine learning.
  + Performance enhancement of selected machine learning applications and workflows.
  + Problem solving at a high level for applications and workflows.
* Provide user support services as part of a team for the SC and partner systems. Work activities are expected to include:
  + Engaging with researchers to understand needs and deliver against them.
  + Effective request tracking and response to user support issues.
  + Documentation, including the development and maintenance of locally written user guides for scientific computing.
* Contribute to knowledge sharing within the team by documenting procedures and liaising effectively with users regarding the delivery of services to meet their needs. Work may be required at other CSIRO sites within Australia.
* 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 collaboratively with colleagues within your team, the business unit and across CSIRO, to reach objectives.
* Adhere to the spirit and practice of CSIRO’s Values, Health, Safety and Environment plans and policies, Diversity initiatives, Zero Harm goals, and Code of Conduct.
* 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 Criteria:**

1. Tertiary degree in science, engineering, computer science, information technology or relevant field.
2. Experience developing and supporting machine learning applications in one or more of the following:
   * Computer vision (classification, detection, segmentation, etc).
   * Natural language processing/understanding (sentiment analysis, document classification, etc).
   * Traditional tabular data-based ML algorithms.
3. High level skills in more than one of the programming languages used by CSIRO’s scientific computing community. These languages include Python, R, JavaScript, MATLAB, Fortran, C, and C++.
4. The ability to work effectively as part of a team, including contributing to team knowledge and improved productivity, and to carry out tasks autonomously in support of scientific research.
5. Demonstrated ability & willingness to contribute novel ideas and approaches in support of scientific investigations.

**Desirable Criteria:**

1. Strong skills in computational science or statistics.
2. Experience with high performance computing, cloud computing, and/or software containers.
3. Experience in a science domain relevant to CSIRO.

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 may be required to obtain and maintain a security clearance at the Baseline level.
* The successful candidate must have the ability to travel interstate.

## **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. We expect our employees to demonstrate behaviours aligned to our values of:

• People First

• Further Together

• Making it Real

• Trusted