# Position Details

## Research Projects- CSOF4

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| The following information is for applicants | |
| Advertised Job Title | Machine Learning Operations Engineer |
| Job Reference | 86144 |
| Tenure | Indefinite Full-time |
| Salary Range | AU$87k - AU$98k per annum (pro-rata for part-time)  plus up to 15.4% superannuation |
| Location(s) | Pullenvale |
| 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 | Robotic Software Team Leader |
| Client Focus – Internal | 90% |
| Client Focus – External | 10% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Dennis via email at dennis.frousheger@csiro.au or phone +61 7 3327 4562 |
| 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. |

**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](https://www.csiro.au/en/about/Indigenous-engagement/Reconciliation-Action-Plan).

### Role Overview

CSIRO’s Data61 is the digital technologies and data science arm of Australia’s national science agency. With around 400 staff and another 300 affiliate staff, Data61 represents one of the largest collections of R&D expertise in artificial intelligence, data science, cybersecurity, robotics, and software engineering in the world. With a focus on impact-driven science and technology, Data61 works across disciplines and industry sectors to solve some of the world’s greatest challenges through digital R&D.

This role is for a Machine Learning Operations (MLOps) engineer with a focus on managing the systems required to train and validate machine learning models. The MLOps engineer will work with researchers and software engineers in our Robotics and Autonomous Systems group to create innovative solutions for robotic applications using machine learning.

### Duties and Key Result Areas

* Management of image and 3D LiDAR data sets for use in training machine learning models
* Configuration and management of automated build systems to train machine learning models
* Validation and testing of trained machine learning models
* Develop and maintain documentation for dataset management and model building and validation processes
* Work collaboratively as part of a multi-disciplinary research group
* 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.

## **Selection Criteria**

#### Essential

1. Bachelor’s degree in software engineering, computer science or equivalent
2. Software development experience in Python
3. Experience managing datasets for machine learning projects, including familiarity with image annotation
4. Experience building machine learning models, manually and with automatic build systems, and applying version control to them
5. Knowledge of machine learning frameworks such as TensorFlow or PyTorch

## **Desirable**

1. Experience with container technologies, such as Docker, Kubernetes and Kubeflow

## **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.

Special 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](http://www.csiro.au/) and [data61.csiro.au](https://data61.csiro.au/) 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