# Position Details

## Research Projects- CSOF5

|  |
| --- |
| The following information is for applicants |
| Advertised Job Title | DevOps Engineer – Square Kilometre Array (SKA) |
| Job Reference | 74322 |
| Tenure | Specified Term of 5 years Full-time or part-time  |
| Salary Range | AU$100k - AU$108k pa (pro-rata for part-time) plus up to 15.4% superannuation |
| Location(s) | Perth, Western Australia |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * Australian Citizens and Permanent Residents
* New Zealand Citizens
* Australian temporary residents who and have the right to work for the expected duration of the term (at least to end of August 2026), with no requirement for sponsorship.
 |
| Position reports to the | Research Team Leader – SKA AIV-LOW |
| Client Focus – Internal | 20% |
| Client Focus – External | 80% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Juan Guzman via email at Juan.Guzman@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 or call 1300 984 220. |

### Role Overview

The DevOps Engineer collaboratively manages the continuous integration, testing and deployment pipeline of the integrated Square Kilometre Array (SKA) software system deployed at the integration facilities for the SKA LOW telescope in Australia. The position works closely with SKA software developers, SKA system testers and commissioning scientists to manage these activities. The role is also responsible for maintaining the software infrastructure based on cloud-based technologies such as Kubernetes, in collaboration with the wider international SKA System (DevOps) Team. The position forms part of the growing SKA Assembly, Integration and Verification (AIV) team.

CSIRO is playing a lead role in the development of the world’s largest radio observatory, the SKA, which will be co-located in Australia. The SKA will address fundamental unanswered questions about our Universe including how the first stars and galaxies formed after the big bang, how dark energy is accelerating the expansion of the Universe, the nature of gravity, and the search for life beyond Earth.

The SKA-LOW telescope will be built at CSIRO’s Murchison Radio-astronomy Observatory (MRO) in Western Australia. The MRO is a world-class radio observatory that already hosts telescopes including the Australian Square Kilometre Array Pathfinder and the Murchison Widefield Array.

### Duties and Key Result Areas

* Working in collaboration with the international SKA System (DevOps) Team on managing the continuous integration, testing and deployment pipeline of the SKA software system for the SKA-LOW telescope.
* Provide support for the SKA software infrastructure deployed in Australia to SKA software developers, system testers and commissioning scientists.
* Automate processes and procedures to continuously improve how software is deployed.
* Provide system administration of the servers located at the Integration Facilities in Sydney and Perth.
* Work collaboratively as part of the multi-disciplinary, regionally dispersed, agile team following the Scaled Agile Framework (SAFe) methodology in support of the SKA scientific and technological goals.
* Address problems promptly and in a constructive manner, selecting the most efficient approach and preparing detailed design proposals and experimental protocols.
* Undertake travel to the observatory site (~700km north of Perth), as well as national and international travel, as required.
* 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.
* Adhere to the spirit and practice of CSIRO’s Values, Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Zero Harm goals.
* Other duties as directed.

## **Selection Criteria**

#### Essential

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

1. Bachelor’s/Master's degree in a scientific or technical discipline such as Computer Science or an equivalent field.
2. Sound experience using software infrastructure provisioning tools (such as Docker, Kubernetes or Ansible), and in cloud and/or virtualization platforms (OpenStack, AWS, GCP).
3. Proficiency in Python and shell dialects such as Bash.
4. Demonstrated experience in several DevOps practices and tools such as Continuous Integration/Deployment (CI/CD), automated testing, configuration management and continuous monitoring.
5. Demonstrated experience supporting operations of highly distributed software systems.
6. A history of successful team participation and the motivation to work well independently.
7. Proven ability to identify and proactively address technical problems and issues.

## **Desirable**

1. Experience administering application servers, web servers and databases under Ubuntu or other Debian dialects.
2. Experience using large scale agile frameworks such as SAFe, LeSS or Spotify Model.
3. A background which includes supporting scientific software.

## **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 team 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.

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.

• The ability and willingness to undertake frequent travel to the MRO (~700km north of Perth), as well as national and international travel as required.

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and [Space and Astronomy](https://www.csiro.au/en/Research/Astronomy) 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