# Position Description

## Research Projects – CSOF3

The following information is for applicants

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| Advertised Job Title**:** | Graduate Software Engineer |
| Job Reference: | 61201 |
| Relocation Assistance**:** | Will be provided to the successful candidate if required. |
| Applications Are Open To: | Australian/New Zealand Citizens and Australian Permanent Residents Only |
| Percentage of Client Focus - Internal: | 0% |
| Percentage of Client Focus - External: | 100% |
| Reports to the: | Research Group Leader, Distributed Systems Security, CSIRO Data61 |
| Number of Direct Reports: | 0 |
| Name and Contact Details For Applicant Enquiries | Raj Gaire via email: [Raj.Gaire@data61.csiro.au](mailto:Raj.Gaire@data61.csiro.au)  *Please do not email your application directly to Raj Gaire. Applications received via this method will not be considered.* |
| Contact Details For Applying | Call 1300 984 220 or email [careers.online@csiro.au](mailto:careers.online@csiro.au). |
| How to Apply: | Please apply online at [jobs.csiro.au](https://jobs.csiro.au/) and enter the requisition number**.** Internal applicants please apply via ‘Jobs Central’ through the ‘People Hub’ icon |

## Role Overview:

Data61 is Australia’s data innovation leader, which currently partners with 33 universities in Australia and more than 90 corporate and 30 government structures in order to create Australia’s data-driven future. We are seeking a skilled and enthusiastic software engineer to fill a key role in its Distributed Systems Security (DSS) group, who will mainly contribute to the design, development and delivery of security software platforms and applications in supporting the group’s R&D.

The position requires a skilled, creative, enthusiastic and adaptable Graduate Software Engineer to fill a key role in Data61’s Distributed Systems Security (DSS) group. In this role, the Software Engineer will support the group’s R&D in crafting innovative software solutions and platforms. Work closely with talented researchers and engineers in an open and collaborative environment with a culture of trust and individual empowerment.

## Duties and Key Result Areas:

* Build innovative and quality software applications with Researchers and other software engineers.
* Write clear technical and user documents.
* Under technical supervision and guidance undertake and complete software development activities.
* Under technical supervision and guidance undertake experiments, laboratory analyses or technology development activities.
* Respond courteously and efficiently to client requests, maintaining clear communication regarding mutual expectations and monitoring client satisfaction.
* 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, 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 plans and policies, Diversity initiatives and Zero Harm goals.
* Other duties as directed.

## Competencies:

1. **Teamwork and Collaboration: Proactively seeks and considers the ideas and opinions of others from within and outside the team to help form decisions, plans or actions.**
2. **Influence and Communication: Puts forward ideas by presenting factual information supported by data, definitions, examples, illustrations or other aids, which will assist in conveying meaning.**
3. **Resource Management/Leadership: Provides instruction and assists other staff to complete allocated tasks and activities.**
4. **Judgement and Problem Solving:** Identifies and considers the implications of a range of available alternatives in order to select the most appropriate response to problems of a familiar or recurring nature.
5. **Independence: Recognise and makes immediate changes to improve performance (faster, better, lower cost, more efficiently, better quality, improved client satisfaction).**
6. **Adaptability:** Willingness to change ideas or perceptions based on new information, contrary evidence or other people's points of view. Prepared to try out different approaches.

## Selection Criteria:

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

* Tertiary qualification in Computer Science, Information Technology, Engineering, other relevant field, or equivalent commercial experience in software engineering.
* Solid engineering and software coding skills, with experience in writing scalable, high performance, production quality code.
* Proficiency in a wide range of programming languages such as Python, Java, C/C++, Go, JavaScript or equivalent.
* Proficiency in using RDBMS such as MySQL, PostgreSQL, SQLite.
* Proficiency in developing web based front end applications.
* Knowledge of basic security concepts, e.g., Public/Private keys, encryptions/decryption, digital signature/hashing, etc.

## Desirable Criteria:

* Ability to develop while learning new technologies.
* Experience developing in an agile team environment.
* Experience with software development lifecycle including testing, continuous integration and continuous delivery.
* Experience with Git in a team environment.
* Exposure to containers (e.g. VMs, Docker) for deploying applications.
* Exposure to front end development frameworks especially using node.js, VueJS, AngularJS, ReactJS or equivalent.
* Exposure to automated deployment tools (e.g. Ansible, Kubernetes).
* Knowledge of security tools and protocols.

## About CSIRO:

At CSIRO we solve the greatest challenges through innovative science and technology. See more [online](http://www.csiro.au/)!

In today’s data-focused world, there’s no doubt that numbers count. [Data61](http://www.data61.csiro.au/) are the largest data innovation group in Australia, a connector that brings together technology innovators, businesses and universities to transform Australian industry and to help solve our greatest challenges. A CSIRO business, we are creating our data-driven future.