# Position Details

## Research Scientist/Engineer- CSOF6

|  |  |
| --- | --- |
| The following information is for applicants | |
| Advertised Job Title | Senior Research Scientist – CSIRO’s DATA61 and the Cyber Security CRC |
| Job Reference | 63407 |
| Tenure | Specified Term of 3 years  Full-time |
| Salary Range | AU$113,338 to AU$132,811 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Marsfield. NSW |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian/New Zealand Citizens and Australian Permanent Residents Only  For Specified Term position we will accept applications from temporary residents with full work-rights for the duration of the term, who do not require immigration sponsorship. |
| Position reports to the | Group Leader – Distributed Systems Security |
| Client Focus – Internal | 0% |
| Client Focus – External | 100% |
| Enquire about this job | Dr Surya Nepal via email: Surya.Nepal@csiro.au or phone: +61 2 9372 4256 |
| 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

Data61 envisions a vibrant and globally competitive Australian cyber security industry with greater resilience to cyber threats in business, to enhance confidence in the digital economy by bringing together exceptional people from research and industry. Data61 is building a network with industries, academic and government communities, both nationally and internationally. Data61 provides a good supporting environment for commercialising research results and building innovation through start-ups and active community engagement. The Senior Research Scientist will have an opportunity to collaborate with CRC partners within the Australian cyber security ecosystem and address the challenging problems in cyber security.

This role will help shape the effectiveness of the cyber security of critical infrastructure in Australia through applied research and development. The Senior Research Scientist will work closely with the research, industry and government participants in the Cyber Security Co-operative Research Centre (CRC) and DATA6 's Research in Distributed Systems Security.

In the role of Senior Research Scientist in Cyber Security CRC, you will focus on a research theme of the CRC (See [www.cscrc.org.au](http://www.cscrc.org.au) for further details).

* Resilient Systems
* IoT Systems – Security and Configuration
* Next Generation Authentication Technologies
* Emerging Threats – Network Forensics and Response
* Platform and Architecture for Cyber Security as a Service
* Security Automation and Orchestration
* Privacy Preserving Data Sharing in a Hyperconnected World
* Real-Time Monitoring of Cyber Security Threats

### The Research Scientist will collaborate in developing a stream of research and development that contributes to high quality journal articles acceptable to high impact journals. They will also continually seek to develop skills, experience, and research impact, with the objective of becoming a leading expert in the field.

### Duties and Key Result Areas:

* Lead projects and interact with internal and external stakeholders.
* Supervise PhD students independently within the Cyber Security CRC scholarship programme and contribute to the development of new strategic research areas and ideas.
* Develop innovative concepts and ideas for further research.
* Actively lead and participate in strategic and external R&D projects by undertaking project specific research, implementing software, and communicating with internal and external partners.
* Build strategic relationship with the Cyber Security CRC industry and academic partners.
* Work closely with Cyber Security CRC Research Director and team to secure new client projects.
* Produce high quality scientific and/or engineering papers suitable for publication in quality journals, for client reports and granting of patents.
* Prepare appropriate conference papers and present those at conferences.
* Contribute to the effective functioning of the research team and help deliver Cyber Security CRC’s organisational objectives and plans.
* Undertake regular reviews of relevant literature and patents.
* Undertake an appropriate training and development program developed by CSIRO and CRC.
* CSIRO requires National Police Checks to be provided by preferred applicants for all new positions. Where matters are disclosed in a National Police Check, only those that are relevant to the position and the ability of the applicant to perform the role will be taken into account. Accordingly, it is important to consider, and include in the position description, all duties and responsibilities relevant to the position, to assist with the consideration of any record that may be disclosed through the National Police Check process. For example:
* 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.

## **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.*

* A PhD in a relevant discipline area, such as security, privacy or a closely related field and/or 5+ years in a similar position at an enterprise level.
* High level written and oral communication skills demonstrated through publications and collaboration.
* Demonstrated ability to represent the research team effectively internally and externally, including at national and international conferences, and for a range of different audiences.
* Demonstrated high level of experience in conducting research activities in cyber security and related areas in one or more of the following – security data science, IEEE S&P, ACM CCS, NDSS, Usenix Security, CIKM, and/or KDD.
* Experience in supervising and mentoring junior researchers.
* Demonstrated experience in developing industry project proposals.
* Demonstrated ability to work effectively as part of a research team and to carry out autonomous research.
* A record of science innovation and creativity in the area of cyber security or related areas, plus the ability and willingness to incorporate novel ideas and approaches into scientific investigations.

## **Desirable:**

* Experience in supervising PhD students.
* Experience in participation in national and international industry talks, and industry projects in the area of cyber security.

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 will be asked to obtain and provide evidence of a National Police Check or equivalent. Please note that people 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. To find out more visit us [online](http://www.csiro.au/)!

**About CSIRO Data61**

In today’s data-focused world, there’s no doubt that numbers count. [**Data61**](http://www.data61.csiro.au/) is 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.

**About Cyber Security CRC**

The CyberCRC has been funded for 7 years by the Commonwealth Government’s Cooperative Research Centres Program and has also attracted significant funding from its participants. The CyberCRC is an industry-driven collaboration to create and enhance Australian cyber security capability. With two research programs, ‘Critical Infrastructure Security’ and ‘Cyber Security Solutions as a Service’, the CyberCRC will deliver innovative research, education and training outcomes that solve core challenges for public and private sector partners, with flow on effects for broader industry and community. It will support the training and development of the future Australian cyber security workforce through traditional education programs with university and industry partners; cross-seed knowledge from a range of disciplines across industry and academia to influence innovative approaches to cyber security; and build awareness of cyber security habits and risks. The Cyber CRC has 25 participants which includes 19 industry and government entities and 6 universities. The CyberCRC fosters collaboration with industry, academia, and government to deliver collaborative research outcomes articulated by industry and government. This research will solve real-world problems that organisations face today and that, in the future, we can deliver these solutions to industry, government and all Australians, while developing over the next 7 years the cyber security workforce of the future that will be embedded into our participant organisations.