# CSIRO Postdoctoral Fellowship – CSOF4

Role summary for potential applicants

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| Advertised Job Title**:** | Postdoctoral Fellowship – Cyber Security |
| Reference Number**:** | 46902 |
| Classification**:** | CSOF4 |
| Salary Range: | AU $80,833 to AU $91,451 plus up to 15.4% superannuation |
| Location**:** | Sydney or Melbourne |
| Tenure: | Specified Term of 3 years |
| Relocation assistance**:** | Will be provided to the successful candidate if required. |
| Applications are open to: | * All Candidates |
| Functional Area**:** | Research Scientist / Engineer - Postdoc |
| % Client Focus - Internal: | 100% |
| % Client Focus - External: | 0 |
| Reports to the: | Research Team Leader, Distributed Systems Security |
| Number of Direct Reports: | 0 |

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| **Role Overview:** |
| **Postdoctoral Fellowships** at CSIRO provide opportunities to scientists and engineers, who have completed their doctorate and have less than three years relevant postdoctoral work experience. These fellowships will help launch their careers, provide experience that will enhance their career prospects, and facilitate the recruitment and development of potential leaders for CSIRO.  Postdoctoral Fellows are appointed for up to three years and will work closely with a leading Research Scientist or Engineer in their respective field. They carry out innovative, impactful research of strategic importance to CSIRO with the possibility of novel and important scientific outcomes. They present the findings in appropriate publications and at conferences.  The role of this Postdoctoral Fellow is to conduct research in the area of automating cyber security, building resilient systems, IoT security and cyber security governance and awareness. This will lead to reputed international publications such as IEEE S&P, ACM CCS, NDSS, Usenix Security, Crypto and Eurocrypt or similar conferences.  Under the guidance of the Distributed Security Systems Senior Researchers, within the Software and Computation Science Program at CSIRO Data61, the Postdoctoral Fellow will undertake research and actively collaborate with well-known Australian and International academics in the field.  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 and academic communities both nationally and internationally. The Postdoctoral Fellow will have an opportunity to collaborate with other Data61 partners as part of the project*.* |

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| **Duties and Key Result Areas:** |
| * Under the direction of Senior Research Scientists, carry out innovative, impactful research of strategic importance to cyber security that will, where possible, lead to novel and important scientific outcomes. * 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. * Provide leadership to the development of innovative concepts and ideas for further research. * Make a contribution to the effective functioning of the research team and help deliver CSIRO Data61’s organisational objectives and plans. * Work collaboratively with colleagues within the team, Data61 and across CSIRO. * Undertake regular reviews of relevant literature and patents. * Communicate 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, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals. * Undertake an appropriate training and development program developed by CSIRO. * Other duties as directed.   ***CSIRO’s postdoctoral training program***is developed between the Postdoctoral Fellow and a CSIRO scientist. The program will focus on enhancing the Fellows’ capabilities to the level expected of an independent researcher and will include on-the-job and course-based development encompassing:   * Discipline-specific techniques and protocols * Professional growth * Project management * Communication and influencing skills * Working and collaborating with others   <http://www.csiro.au/en/Careers/Student-and-graduate-programs/Postdoctoral-fellowships> |

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| **Selection Criteria:** |
| *Under CSIRO policy only those who meet all essential criteria can be appointed*  ***Pre-requisites***   * **Education/Qualifications:** A doctorate (or will shortly satisfy the requirements of a PhD) in a relevant discipline area, such as computer science, electrical engineering, information technology or communication engineering.   ***Please note:*** *To be eligible for this role you must have* ***no more than 3 years*** *of relevant postdoctoral experience.*   * **Communication: High level written and oral communication skills with the ability to represent the research team effectively internally and externally, including at national and international conferences.** * **Publications: A record of publications in quality, peer reviewed journals.** * **Behaviours:** A history of professional and respectful behaviours and attitudes in a collaborative environment.   ***Essential Criteria:***   1. **Proven ability to conduct high quality research, development and implementation in cyber security and trust. Preferably have publications in the top tier security conferences IEEE S&P, ACM CCS, NDSS, Usenix Security, Crypto and Eurocrypt or similar level conferences.** 2. **Demonstrated experience in conducting research activities in cyber security, more specifically in the area of automating cyber security, building resilience systems, IoT security, applied cryptography and cyber security governance and awareness.** 3. **The ability to work effectively as part of a research team, plus the motivation and discipline to carry out autonomous research.** 4. **A record of science innovation and creativity in the area of cyber security, plus the ability and willingness to incorporate novel ideas and approaches into scientific investigations.**   **Desirable Criteria:**   1. Experience in wide range of security technologies. 2. Experience in developing security, privacy and trust solutions for distributed systems.   ***CSIRO Values:***  As Australia’s Innovation Catalyst, CSIRO has strategic actions underpinned by behaviours aligned to Excellent science, Inclusion, trust & respect, Health, safety & environment and Deliver on commitments.  In your application and at the interview you will need to demonstrate alignment with these behaviours.  ***Data61 Values:***  **Great Impact**: We focus our valuable resources on areas where we can lead globally and have large impact for Australia, to aid our future prosperity and independence.  **Mastery**: We are fearless, curious and we improve every day. We strive to excel in research, technology and business, and to work with the best in the world.  **Co-Creation of Value**: Everything we do involves co-creation with our network: team, customers and partners. Generously empowering their success is central to our success.  **Ownership of Results**: We jointly hold ourselves accountable for our actions. We do this via trust and commitment.  **People and their Differences**: We embrace the creativity that comes from the diversity of our people.  **Agility and Flexibility**: We view the changing world as an opportunity. This requires agility and flexibility in everything we do; everything changes, except our constant desire to adapt.  **Tell it Straight, with Respect:**We say what we mean, mean what we say, and do not mislead, obfuscate or spin. We're direct and always respectful.  **Eligibility:**  To be appointed as a Postdoctoral Fellow within CSIRO, candidates are required to have **submitted** their PhD at the time of commencement, as a minimum requirement, if PhD conferment has not been obtained. If a candidate has submitted, but their PhD has not yet been formally attained, the starting salary will be CSOF4.1 ($80,833). Upon CSIRO receiving written confirmation that the PhD has been awarded (within a six month period from commencement date), the salary will be increased to the negotiated level and the difference will be back-paid to the Officer’s start date.  **Other special requirements:**  Appointment to this role may be subject to conditions including security/medical/character clearance requirements. Applicants who are not Australian Citizens or Permanent Residents may be required to undergo additional security clearance processes; which may include medical examinations and an international standardised test of English language proficiency (i.e. IELTS test). <http://www.ielts.org/default.aspx> |

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| **Other Information:** |
| **How to Apply**  Please apply for this position online at [www.csiro.au/careers](http://www.csiro.au/careers). You may be asked to provide additional information (online) relevant to the selection criteria. If so, then responding will enhance your application so please take the time to provide relevant succinct answers. Applicants who do not provide the information when requested may not be considered.  If you experience difficulties applying online call 1300 984 220 and someone will be able to assist you. Outside business hours please email: [csiro-careers@csiro.au](mailto:csiro-careers@csiro.au).  **Referees**: If you do not already have the names and contact details of two previous supervisors or academic/ professional referees included in your resume/CV please add these before uploading your CV.  **Contact:** If after reading the selection documentation you require further information please contact:  Surya Nepalvia email: [Surya.Nepal@data61.csiro.au](mailto:Surya.Nepal@data61.csiro.au) or phone: +61 2 9372 4256.  Please do not email your application directly to Dr Nepal. Applications received via this method will not be considered.  **About CSIRO**  Australia is founding its future on science and innovation. Its national science agency, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) is a powerhouse of ideas, technologies and skills for building prosperity, growth, health and sustainability. It serves governments, industries, business and communities across the nation.  Find out more! [www.csiro.au](http://www.csiro.au).  **CSIRO Data61** 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.  **What CSIRO offers you**  You will be joining our small, dynamic research group in Sydney and Melbourne which is part of the Software and Computation Systems Program at Data61. We have a strong passion for doing world class science and making a difference by applying it to real world problems across CSIRO business areas and external clients. We have strong connections to other research teams and groups in CSIRO, top Australian research universities, and internationally well recognised researchers in security and privacy. Working in our team will allow you to leverage these connections to widen and strengthen your own professional network. We offer a flexible working conditions to suit your needs, and support travel to international conferences.  Working in CSIRO Data61 offers opportunities for you to step up and assume responsibility and leadership in research and community activities. At CSIRO we support balance. Let us know how we can make this role flexible for you |