**Research Projects – CSOF5**

Role summary for potential applicants

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| Advertised Job Title**:** | Software Engineer in Cyber Security – CSIRO/DATA61 |
| Reference Number**:** | 58198 |
| Classification**:** | CSOF5 |
| Salary Range: | $97K – 105K + up to 15.4% superannuation |
| Location**:** | Sydney, Canberra or Melbourne |
| Tenure: | Indefinite |
| Relocation assistance**:** | Will be provided to the successful candidate if required. |
| Applications are open to: | * Australian and NZ Citizens, * and Australian Permanent and Temporary Residents |
| Functional Area**:** | Research Project |
| % Client Focus - Internal: | 0 |
| % Client Focus - External: | 100% |
| Reports to the: | Research Group Leader, Distributed Systems Security, CSIRO Data61 |
| Number of Direct Reports: | 0 |

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| **Role Overview:** |
| Data61 is Australia’s data innovation leader, which currently partners with 29 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 IoT and security software platforms and applications in supporting the group’s R&D.  This is an exciting role that will help shape the effectiveness of the cyber security of critical infrastructure in Australia through applied research and development. The successful candidates will work closely with the research, industry and government participants in DATA61 ’s Research in Distributed Systems Security. As a part of our team, you'll work in projects of both national and international significance, produce innovative software and solutions and create high impact around the country and the world. |

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| **Duties and Key Result Areas:** |
| * + Design and develop IoT, Cloud, Security and BigData applications   + Develop software requirements based on communication with clients and users   + Work with researchers and software team members to design, develop and deliver quality software   + Write technical and user documentations   + Help maintain the group’s internal wiki and external website   + Other duties as directed. |

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| **Selection Criteria:** |
| *Under CSIRO policy only those who meet all essential criteria can be appointed*  ***Pre-requisites***   * **Education/Qualifications:** Tertiary qualification in Science, Engineering, Computer Science, Information Technology, other relevant field, or equivalent commercial experience in software engineering. * **Communication:** Ability to communicate in a fluent and courteous manner, both orally and in writing, offering factual information supported by proven data, and providing appropriate feedback when required * **Behaviour:** A history of professional and supportive behaviours and attitudes in a collaborative environment * **Flexibility:** Effectively handle a number of contending priorities at a time, and carry out non-routine tasks under general direction. * **Problem Solving:** Ability to investigate routine problems by identifying and considering the implications of a range of available alternative solutions.   ***Essential Criteria:***   1. Solid engineering and software coding skills, with experience in writing scalable, high performance, production quality code. 2. Proficiency in a wide range of programming languages including Python, Java, C/C++, Go or equivalent. 3. Proficiency in using RDBMS such as MySQL, PostgreSQL, Sqlight. 4. Proficiency in front end development, especially using node.js, VueJS, Angular 4+, ReactJS or equivalent. 5. Familiar with basic security concepts and the corresponding technologies, e.g., Public/Private keys, encryptions/decryption, digital signature/hashing, etc. 6. Familiar with cloud solutions/providers e.g. OpenStack, AWS, Azure.   **Desirable Criteria:**   1. Experience with testing, continuous integration and continuous delivery 2. Experience with containers (e.g. VMs, Docker) for deploying applications 3. Experience developing in an agile team environment 4. Experience with Git in a team environment 5. Familiar with BigData tools e.g. Cassandra, Kafka, Spark and Hadoop. 6. Ability to work effectively as part of a multi-disciplinary, regionally dispersed development team, and carry out tasks under general direction from scientific researchers 7. Have demonstrated interest in research, collaboration and publications.   ***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:***  In Data61, our leaders will be expected to demonstrate the following values:   1. Hierarchy: Country, Company, Team, Individual 2. Openness: Open debate, collaboration, full commitment 3. Learning: Calculated risks, institutionalise learning, fast cadence 4. Impact: Tackle hard problems, create the future, focus on outcomes 5. Stewardship: Lead, make each function and co. stronger over time   **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.  **Work Portfolio:** If you have any code examples that we can look at, such as open source contributions (e.g. on Github or BitBucket), we would appreciate if you mentioned it in your application.  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. |