# Research Projects CSOF5

Role summary for potential applicants

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| Advertised Job Title**:** | Distributed Computing Engineer |
| Reference Number**:** | 45731 |
| Classification**:** | CSOF5 |
| Salary Range: | AU $95,369 to AU $103,205 plus up to 15.4% superannuation |
| Location**:** | Sydney, NSW |
| Tenure: | Specified Term of 3 years  |
| Relocation assistance**:** | * Will be provided to the successful candidate if required.
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| Applications are open to: | [ ]  Australian Citizens Only[x]  Australian Citizens and Permanent Residents Only* [ ]  All Candidates
* *For Specified Term positions, we will accept applications from Temporary Residents with working rights for the length of the term, who do not require sponsorship.*
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| Functional Area**:** | * Research Projects
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| Number of Direct Reports: | * 0
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| Reports to the: | * Team Leader, Confidential Computing
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| **Role Overview:** |
| The role of Research Projects staff in CSIRO is to collaborate in scientific activities with other research staff usually by assisting with detailed planning, undertaking or assisting with experimental and observational work, and in carrying out the more practical aspects of the work. At senior levels, Research Projects staff may be involved in providing consulting services, science management and/or industry liaison.Data61 has an exciting opportunity for an Engineer to work on large scale, high performance computing environments for confidential computing. We are seeking people with proven expertise in designing and implementing high-performance distributed compute environments for very large data sets. We can provide flexible working hours, ownership of projects, freedom to experiment with new technologies and the ability to learn and grow to your full potential.Data61 is the largest data innovation group in Australia. We are unrivalled in our intellectual capital and our network with the global technology marketplace. The combined group will bring together approximately 600 research staff working in digital technologies to create benefit for Australia. Data61 will continue to develop Australia’s future leaders with its strong 300+ PhD student program in collaboration with our best universities across Australia. |

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| **Duties and Key Result Areas:** |
| * Designing and developing high performance compute environments for very large datasets.
* Producing high quality engineering artefacts (e.g., design, patents, code, and demos) suitable for deployment in real-world 24/7 environments.
* Building elegant, efficient and readable code.
* Under the guidance of Senior Engineers, work collaboratively and honestly with internal and external colleagues, clients and partners.
* Maintain a high ethical and performance standard.
* Communicate effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Work as part of a multi-disciplinary, often regionally dispersed research team, to carry out tasks autonomously in support of scientific research.
* Work collaboratively with colleagues within your team, the business unit and across CSIRO, to reach objectives.
* Set-up and/or maintain effective and efficient work teams, allocate and manage resources and undertake staff performance management and career development.
* Choose appropriate management strategies and communication styles to maintain high levels of motivation and productivity, give feedback for development purposes and provide support and direction for improvement, as required.
* Adapt and/or develop original experimental methods/equipment/ software/concepts/ideas in support of existing and further research.
* Adhere to the spirit and practice of CSIRO’s Values, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.
* 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:***1. **Education/Qualifications:** A masters and/or equivalent engineering experience in a relevant discipline area, such as big data analytics, distributed computing, or system architecture.
2. **Industry Experience:** At least one year of industry experience in a comparable position.
3. **Communication:** Strong written and oral communication skills including the ability to prepare reports and present the results customer and stakeholder meetings.
4. **Behaviours: A history of professional and respectful behaviours and attitudes in a collaborative environment.**

***Essential Criteria:***1. Experience with one or more of the following programming languages in an industrial engineering context: Java, Scala, Python, C++, and any distributed programming, message-processing frameworks.
2. More than one year of working in industry in a comparable position.
3. Experience in one or more of the following: large scale distributed computing, data analytics, data provenance, cloud computing.
4. Experience measuring and analysing the performance of large-scale distributed systems.
5. Ability to think creatively, to work collaboratively and to perform tasks under minimal supervision.

**Desirable Criteria:**1. A proven record of engineering innovation and creativity.
2. A verifiable record of delivering products (such as an open source release)
3. A record of quality publications and presentations.
4. Exposure to both industry and academic research.

Data61 is a values based organisation. Our leaders will be expected to demonstrate the following 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.**CSIRO is a values based organisation. You will need to demonstrate behaviours aligned to our values of:*** Integrity of Excellent Science
* Trust & Respect
* Creative Spirit
* Delivering on Commitments
* Health, Safety & Sustainability

***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*](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 will need to upload your cover letter and resume/CV as one document, expressing your interest in the role and broadly addressing your suitability. Please provide sufficient relevant information to enable the selection panel to assess your suitability. Should your application proceeds to the next step, you may be asked to provide additional information.If you experience difficulties applying online call 1300 984 220 and someone will be able to assist you. Outside business hours please email: careers.online@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: Dr Max Ottvia email: max.ott@data61.csiro.au or phone: +61 419 145 516 Dr Stephen Hardyvia email: stephen.hardy@data61.csiro.au or phone: +61 2 9490 5532Please do not email your application directly to Dr Ott or Dr Hardy. 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). **About 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.Find out more! <http://www.data61.csiro.au/> |