# Position Details

## Research Management – CSOF8

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| The following information is for applicants |
| Advertised Job Title | Research Director – Cyber Physical Systems |
| Job Reference | 68981 |
| Tenure | Specified Term – 3 years |
| Salary Range | Attractive salary package is negotiable |
| Location(s) | Negotiable – Sydney, Melbourne, Brisbane or Canberra |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | All candidates |
| Position reports to the | Data61 Business Unit Director |
| Number of Direct Reports | 5 |
| Enquire about this job | Please send all queries relating to this role to data61@perrettlaver.com  |
| How to apply | CSIRO has appointed Perrett Laver to assist us with this senior position and all applications should be sent directly to data61@perrettlaver.com |

### Role Overview

CSIRO’s Data61 is the digital technologies and data science arm of Australia’s national science agency. With around 500 staff and another 500 affiliate staff through its network of 30 university partners, Data61 represents one of the largest collections of R&D expertise in artificial intelligence, data science, cybersecurity, robotics, and software engineering in the world. With a focus on impact-driven science and technology, Data61 works across disciplines and industry sectors to solve some of the world’s greatest challenges through digital R&D.

Data61 is now looking for the Research Director – Cyber Physical Systems to join new Director Professor Jon Whittle’s Leadership Team and oversee the Cyber Physical Systems (CPS) Program. CPS includes the largest robotics team in Australia, which is globally recognised, and has additional strengths in resource-constrained sensing and processing in challenging environments, augmentation of humans with autonomous systems and integrating AI with biological systems. The program seeks to deliver on CSIRO’s mandate for world-class research that provides innovative solutions for industry, government and the community.

The Research Director sets the vision and strategy for the CPS Program as well as being responsible for its operation. The successful candidate must be a strategic, collaborative and inclusive science leader who wants to carry out excellent science and solve practical problems with a team of like-minded peers. They will work as part of a cohesive and collegiate Leadership Team, including other Research Directors, to realise Data61’s vision and work collaboratively with colleagues across CSIRO on developing an agenda for tackling the nation’s greatest challenges.

For more information about Data61 Cyber Physical Systems, please visit: <https://data61.csiro.au/en/Our-Research/Programs-and-Facilities/Cyber-physical-systems>

### Duties and Key Result Areas

**Impact Science Leadership**

* Build on team success, review and implement the Data61 Cyber Physical System (CPS) research program’s strategic plan
* Lead the CPS program to develop and realise its science vision in partnership with stakeholders and science partners
* Identify new opportunities and markets in Australia and overseas, and engage key stakeholders and clients to build support for investment in opportunities
* Sustain and enhance the R&D culture of science excellence, creativity, innovation and flexibility
* Integrate science with project and impact delivery through an effective “Path to Impact” framework
* Be accountable for scientific performance, including citations, patents, students and research that has been commercialised
* Catalyse innovation through science networks, review and sponsor exploratory and science capability development projects
* Build a pipeline of contracts (3 to 5-year focus) including identification of inter-departmental opportunities and manage the Program’s portfolio of intellectual property
* Support the Data61 Director in departmental science reviews
* Guide the set of projects needed to deliver against Data61’s strategy

**Capability Leadership**

* Communicate the Program’s vision to inspire staff and sustain and nurture awareness of Data61’s science quality and impact in the broader Australian community
* Attract, develop and retain world class talent which meets current and future needs, in the short and longer term
* Support the Research Group and Team Leaders to build effective teams and groups, manage career development for staff and succession plan
* Build long-term science capability to support the delivery of the Program’s research and impact, including forecasting demand, monitoring science trends and stakeholder needs, and building a high-performance culture
* Effectively lead change initiatives across the Program and Data61
* Strive for “Zero Harm” (physical and psychological) and actively promote a healthy, safe and environmentally sustainable workplace; in doing so, model appropriate and professional behaviour in the workplace and manage people matters proactively

**Engagement and Partnerships**

* In consultation with research partners and end users, develop a roadmap for a deeper and more effective national partnership across industry and government
* Build strategic relationships within the organisation to execute CSIRO and Data61 strategy, including fostering mobility and cross-deployment of staff, and developing productive relationships
* Develop and maintain national and/or international research collaborations and professional networks to keep abreast of emerging advances in relevant science fields and industry challenges
* Manage external scientific relationships with partners to advance Data61 interests, science delivery and impact

**Resource Leadership**

* Lead and manage the Program’s financial resources, people, infrastructure and other assets to ensure their effective, sustainable and efficient use
* Ensure best practice governance and management of commercial activities and intellectual property in the Program
* Manage delivery against milestones and appropriate quality standards
* Promote high standards of project management in the Program
* Contribute to the development of science plans for future infrastructure

## **Required Competencies**

* **Teamwork and Collaboration:** Creates and fosters an environment in which there is a high level of cooperation within and between teams. Facilitates positive team relationships to build interactions across Business Units and the organisation.
* **Influence and Communication:** Uses complex influencing strategies, for example, assembling strategic coalitions, building behind the scenes support and the tactical use of information to gain support.
* **Resource Management/Leadership:** Contributes to or defines Business Unit/ organisational policy directions, strategic planning and operationalises the vision for staff and gains commitment to the direction chosen. Plans, seeks, allocates resources and monitors to achieve outcomes. Adopts a mentor role.
* **Judgement and Problem Solving:** Resolves major conceptual scientific, technical, commercial or management problems, which have a significant impact upon the field of research, professional function, the Business Unit or the Organisation. Situations faced have little or no precedent and require original concepts and approaches.
* **Independence:** Commits significant resources in the face of uncertainty and takes calculated risks to improve performance and achieve challenging goals. Uses personal energy to drive change strategies. Formulates and implements contingency plans to minimise the impact of potential risks. Accepts personal responsibility for the outcomes of decisions/risks taken.
* **Adaptability:**Is flexible in response to external change or when faced with external constraints. Identifies and promotes the opportunities arising as a result of change.

## **Selection Criteria**

#### Essential

* A doctorate and/or equivalent research leadership experience in a relevant data/digital science discipline, such as robotics, computer vision, autonomous systems.
* Evidence of an ability to strategically develop programs and opportunities that respond to national and global research challenges, drawing from knowledge in at least one of the following domains:
	+ robotics and autonomous systems
	+ imaging and computer vision
	+ distributed and mobile sensing, internet of things
	+ artificial intelligence combined with biological entities (e.g., human-machine collaboration, applications in animal and plant monitoring)
* Evidence of successful development and leadership of a pipeline and portfolio of science, research and innovation on a national and international scale
* Evidence of strong industry and/or government engagement and strategic relationship management that grows new impact opportunities and supports positive and sustainable commercial outcomes
* Ability to work effectively as an integral member and leader of a multi-disciplinary, regionally dispersed research team, and foster an environment in which there is a high level of co-operation within and between teams
* Demonstrated ability to establish productive teams, manage performance, undertake strategic planning and financial management, operationalise the strategic vision for staff and gain commitment to the direction chosen
* Demonstrated leadership and excellence in a relevant field of science, as demonstrated by high‐quality peer reviewed, published science since PhD (minimum five years) with an international research reputation
* Strong track record of uptake, adoption and impact delivered to industry and other end users

**Desirable criteria**

* An exceptional record of science innovation and creativity plus the ability to apply well developed research skills to scientific investigations of significant consequence

**Special Requirements**

* The successful candidate will be required to undertake domestic and international travel as required
* 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/)!

Find out more about CSIRO [Data61](https://data61.csiro.au/)