Position Details

Research Scientist in Business Processes and AI - CSOF5

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| **The following information is for applicants** | |
| Advertised Job Title | Research Scientist in Business Processes and AI, Trustworthy Processes Team |
| Job Reference | 85303 |
| Tenure | Specified Term of 36 months |
| Salary Range | AU$102,724 to AU$111,165 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Brisbane, QLD |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | All Candidates |
| Position reports to the | Team Leader |
| Client Focus – Internal | 80% |
| Client Focus – External | 20% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Nick van Beest via email at nick.vanbeest@csiro.au |
| 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**

CSIRO’s Data61 is the data and digital specialist arm of Australia’s national science agency. Data61 is at the forefront of digital science and innovation, leading both in developing new applied research and technologies as well as working across disciplines to drive adoption and impact.

The role of Research Scientist staff is to conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. The Research Scientist may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. The Research Scientist will have the opportunity to build and maintain networks, play a lead role in securing project funds, provide scientific leadership and pursue new ideas and approaches that create new concepts.

As part of the Trustworthy Processes (TP) research team, this position role will make independent and collaborative contributions to the development of new ideas, collaborative projects, methods, and technologies for the design and execution of efficient, compliant and reliable processes.

This position will carry out world-class research to advance knowledge in trustworthy and dependable AI-supported processes, focussing on modelling, optimisation and generation of processes, automation of business process compliance, and advanced process analysis and prediction technology.

**Duties and Key Result Areas**

* Under the supervision of more senior researchers, assist in the planning and preparation of research proposals and carry out research investigations, requiring originality, creativity and innovation.
* Select the most profitable line of attack upon a problem, prepare detailed design proposals and experimental protocols.
* Draw on professional expertise, knowledge of other disciplines and research experience to recognise opportunities for innovation and generate new theoretical perspectives by pursuing new ideas/approaches and networking with scientific colleagues across a range of disciplines.
* Participate in identification of further opportunities which arise from research and initiate new lines of research.
* Undertake activities focused on one or more elements of larger research projects.
* Present results in a meaningful format, prepare reports for clients and/or write scientific papers for publication.
* Provide supervision and coaching to students.
* 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 research team 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 procedures and policy, 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:** Uses knowledge of other party's priorities and adapts presentations or discussions to appeal to the interests and level of the audience. Anticipates and prepares for others’ reactions.
* **Resource Management/Leadership:** Allocates activities, directs tasks and manages resources to meet objectives. Provides coaching and on the job training, recognises and supports staff achievements and fosters open communication in the team.
* **Judgement and Problem Solving:** Investigates underlying issues of complex and ill-defined problems and develops appropriate responses by adapting/creating and testing alternative solutions.
* **Independence:** Plans, sets and works to meet challenging standards and goals for self and/or others. Recognises where endeavours will make the most impact or difference, decides on desired outcome and sets realistic goals to reach this target.
* **Adaptability:** Copes with ambiguity or situations that lack clarity. Adapts readily to changing circumstances and new responsibilities (which may include activities outside own preferences) in the interests of achieving team objectives. Recognises the need for and undertakes personal development as a result of change.

**Selection Criteria**

**Essential**

1. A PhD in computer science or similar.
2. Demonstrated ability to undertake original, creative and innovative research by generating and pursuing novel ideas and solutions with publications in top tier software engineering or related venues.
3. Demonstrated track record in high quality research with impactful outcomes.
4. Knowledge of and experience with business process modelling and execution.
5. Knowledge of and experience with process mining and analysis.
6. Knowledge of AI technology such as automated planning.
7. Experience with formal process verification and computational complexity.
8. Experience to work effectively in a research team and provide supervision and mentoring to research students.
9. Demonstrated high level of oral and written communication skills with the ability to represent Data61 research externally to both academia, government and industry.

**Desirable:**

1. Research experience in one or more of the following fields: artificial intelligence, machine learning, blockchain.
2. Strong track record of developing efficient complex algorithms in languages such as Java and C++.

**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.
* If the successful candidate is not an Australian Citizen or Permanent Resident, they may be required to undergo additional security clearances, which may include medical examinations and an international standardised test of English language proficiency (i.e. IELTS test).- <https://ielts.com.au/>

**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://www.csiro.au/en/about/people/business-units/Data61) (<https://www.csiro.au/en/about/people/business-units/Data61>)