# Position Details

## Research Scientist/Engineer- CSOF5

|  |  |
| --- | --- |
| The following information is for applicants | |
| Advertised Job Title | Behavioural Scientist for Human Machine Teaming |
| Job Reference | 84954 |
| Tenure | Indefinite  Full-time (part-time negotiable) |
| Salary Range | AU$102,724 to AU$106,947 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Brisbane, Canberra, Hobart, Melbourne or Sydney (by negotiation) |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | * Australian/New Zealand Citizens and Australian Permanent Residents |
| Position reports to the | Team leader – Inclusive socio-technical innovation |
| Client Focus – Internal | 50% |
| Client Focus – External | 50% |
| Number of Direct Reports | 0 |
| Enquire about this job | Andrew Reeson andrew.reeson@csiro.au or phone +61 2 6216 7323 |
| 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

The role of Research Scientist Staff in CSIRO is to conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. You may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. You 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 a digital behavioural scientist you will have the opportunity to contribute to an exciting range of research projects through the Analytics & Decisions Sciences program within CSIRO's Data61. With humans and machines becoming ever more closely intertwined, there is an urgent need for new research, and research methods, to understand and guide human-machine relationships. This position will apply behavioural science to inform the design of technology, particularly artificial intelligence (AI), that complements human abilities and addresses user needs.

This is primarily a research position which will contribute to the development of novel science and methodology around human-machine interactions, but there will also be opportunities to apply these insights to the design of new technologies and products. You will be considering behavioural science and the role of technology in society to help design workflows which facilitate collaboration between humans and artificial intelligence, drawing out the strengths of each (please see CSIRO’s CINTEL Future Science Platform for more on our approach to such collaborative intelligence).

As a research scientist in CSIRO’s Data61 you will be fluent in data handling and analysis, human-centred research methods and working with human participants. Your tasks will include literature reviews, experimental design, data handling, statistical analysis, paper and report writing. You will also contribute to engaging with clients to deliver existing and develop new projects.

### Duties and Key Result Areas:

* Liaise with clients and other stakeholders to determine their needs and take personal responsibility for client satisfaction.
* Under limited direction, assist in the planning and preparation of research proposals and carry out research investigations, requiring originality, creativity and innovation.
* Present results in a meaningful format, prepare reports for clients and/or write scientific papers for publication.
* Address problems promptly and in a constructive manner, selecting the most profitable lines of attack upon a problem, preparing detailed design proposals and experimental protocols.
* Undertake experimental and/or observational research activities, often requiring the supervision and/or training of others to ensure experiments are established and conducted in accordance with research design, or as required.
* Draw on professional expertise, knowledge of other disciplines and research experience, recognise opportunities for innovation and generate new theoretical perspectives by pursuing new ideas/approaches and networking with scientific colleagues across a range of disciplines.
* 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, often regionally dispersed research team, and business unit to carry out tasks in support of CSIRO’s scientific objectives.
* Manage sensitive data appropriately.
* Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Making Safety Personal 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 response 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 changes.

## **Selection Criteria**

#### Essential

*Under CSIRO policy only those who meet all essential criteria can be appointed.*

1. Relevant postgraduate degree or equivalent relevant work experience in behavioural sciences or a related discipline (including psychology, human factors, etc.)
2. Demonstrated ability in data analysis or statistical modelling
3. Demonstrated ability to work effectively as part of a multi-disciplinary research team, and carry out research projects autonomously
4. Track record of novel applied behavioural research related to digital technology and scholarly publishing
5. Experience in conducting research studies involving human participants

## **Desirable:**

1. Experience in human-computer interaction (HCI) or similar
2. Experience in using R or python (or similar) for data analysis
3. Familiarity with machine learning and/or artificial intelligence methods
4. Familiarity with qualitative research methods

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.

## **About CSIRO:**

We solve the greatest challenges through innovative science and technology. To find out more visit us [online](http://www.csiro.au/)!