



Position Details

Research Projects- CSOF7

Job Title	Solution Architect / Engineer
Job Reference	75042
Tenure	Indefinite (Full-time)
Salary Range	AU \$139,166 – AU \$153,975 per annum (pro-rata for part-time) plus up to 15.4% superannuation
Location(s)	Negotiable across all locations
Relocation Assistance	Will be provided
Position reports to the	Research Manager
Client Focus – Internal	60%
Client Focus – External	40%
Number of Direct Reports	0
Enquire about this job	Contact Max Ott via email at max.ott@data61.csiro.au

Role Overview

The role of Research Projects staff in CSIRO is to collaborate in scientific and technological activities with other research staff usually by assisting with detailed planning, undertaking or assisting with experimental, observational or technology development 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 and technology management and/or industry liaison.

Solution Architects will work with product, UX, engineering & research teams to collaboratively find the right solution which best solves a client's problem; is based on the best science; is built to the highest standard; and can be delivered within budget and time constraints.

Solution Architects will actively seek to understand the wide variety of projects and research activities across the organisations. They will freely share their experience having done similar things in the past and help to make individual project teams to think out of the box or see their problems from a different perspective.

Duties and Key Result Areas:

- Design & develop novel solutions for a wide variety of client problems based on the best science and technology and in close collaboration with our product, engineering and relevant science teams.

- Discover in collaboration with Product the technical and architectural constraints in delivering and integrating our solutions into the client's environment to optimise.
- Proactively stay informed of any relevant science & technology development within CSIRO which can provide a competitive edge in the solutions we can deliver.
- Communicate openly, effectively and respectfully within and across teams, and with key stakeholders, in the interests of good business practice, collaboration and the reputation of both CSIRO and Data61.
- Contribute to CSIRO's engineering discipline by promoting the effective use of software development tools, practices and culture.
- Adhere to the spirit and practice of CSIRO's Code of Conduct, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.
- Other duties as directed.

Selection Criteria

Essential

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

1. Relevant master's degree, or relevant work experience in software engineering.
2. Deep expertise in architecting, developing and deploying commercial-ready software into complex enterprise IT environment as well as modern cloud infrastructure.
3. Proven practical expertise in state-of-the-art enterprise and cloud-native design patterns.
4. Demonstrated experience with engaging with clients, both on the user as well as on the architecture and deployment side to fully understand technical user requirements as well as integration and deployment constraints.
5. Sound interpersonal skills as evidenced by the ability to work effectively and collaboratively with clients, across a large organisation like CSIRO, as well with engineering, product, and UX teams.
6. Good judgement as applied to the identification and successful resolution of complex (technical and non-technical) problems and issues.
7. Experience mentoring junior staff.
8. A minimum of 5 years of commercial software development & deployment experience.

Desirable

1. An undergraduate degree, or equivalent work experience in a science domain.
2. Practical expertise in developing strategic roadmaps.
3. Hands-on experience with developing SaaS products and platforms.
4. Varied programming language paradigms, including object oriented and functional.
5. Cloud DevOps and container technologies (we deploy mostly to AWS ECS).
6. Design and use of REST APIs.
7. A basic understanding of AI technologies.
8. A basic understanding of User Discovery.
9. Agile project management.

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 team as well as industry colleagues.
- **Influence and Communication:** Identifies critical stakeholders and influences them via an influential third party, for example through an established network, to gain support for sometimes contentious, proposals / ideas.
- **Resource Management/Leadership:** Provides leadership that fosters an environment that encourages new ideas and provides support for the development of emerging skills. Creates trust by displaying consistency and understanding through integrity and patience. Plans, seeks, allocates and monitors resources to achieve outcomes.
- **Judgement and Problem Solving:** Anticipates and manages problems in ambiguous situations. Develops and selects an appropriate course of action and provides for contingencies. Evaluates, interprets and integrates complex bodies of information and draws logical conclusions, synthesises proposals and defends options with reasoned arguments.
- **Independence:** Assesses the risk and opportunity of identified strategies, options and actions. Overcomes problems and setbacks in achieving goals. Invariably includes consideration of value-added future impact on bottom line when determining the optimal and efficient use of resources.
- **Adaptability:** Is flexible in response to external change or when faced with external constraints. Identified and promotes the opportunities arising as a result of change.

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. Visit [CSIRO Online](#) and [CSIRO Data61](#) for more information.

CSIRO is a values-based organisation. In your application and at interview you will need to demonstrate behaviours aligned to our values of:

- People First
- Further Together
- Making it Real
- Trusted