

Software Engineer

College/Division	Deputy Vice-Chancellor (Research)
School/Section	Integrated Marine Observing System (IMOS)
Location	Hobart
Classification	HEO 7
Reporting line	Team Leader – Information Infrastructure

Position Summary

The University of Tasmania is building a vision of a place-based University with a mission to enhance the intellectual, economic, social and cultural future of Tasmania, and from Tasmania, contribute to the world in areas of distinctive advantage. The University recognises that achieving this vision is dependent on the people we employ as well as creating a people-centred University that is values-based, relational, diverse, and development-focused.

We are seeking to appoint a Software Engineer in the [Integrated Marine Observing System \(IMOS\)](#) is part of [the Deputy Vice-Chancellor \(Research\) division](#).

The Integrated Marine Observing System (IMOS) is a national collaborative research infrastructure, supported by the Australian Government. It is led by the University in partnership with the Australian marine and climate science community (<http://imos.org.au/>). IMOS provides a national, multi-institutional capability to undertake systematic and sustained observing of the marine environment, from the open ocean onto the continental shelf and into the coast, and across physical, chemical and biological variables.

All observations undertaken by IMOS produce data streams in near real time and/or delayed mode (quality controlled), that are discoverable, accessible, usable and reusable via the Australian Ocean Data Network (AODN). Increasingly, even more data is being made available via AODN from a wide range of partner organisations – research institutions, Federal and State Government departments, and private industry. As the national scale marine observing system, IMOS supports a high level of international collaboration.

The Australian Ocean Data Network (AODN) facility of IMOS has developed a single integrative framework for marine data and information management, discovery and access, supporting both IMOS and the Australian marine community. This infrastructure employs open source principles and is standards-based, utilising ISO and OGC standards for metadata and data, based on an Amazon Web Services platform. The AODN team is structured as two interleaved groups – Information Infrastructure and Data Services –working together to deliver information services for IMOS and the AODN.

An organised individual with a background in computer science and database administration and data management is sought to fill a software engineer position based at the University of Tasmania. The position requires excellent communication skills and the ability to build and maintain effective working relationships with staff and collaborators from a wide range of academic and technical backgrounds. The software engineer will assist in the design and implementation of new data management systems to support the data collection activities of IMOS facilities. This person will provide expertise in full-stack software development of new data-driven systems and the maintenance and improvement of existing systems.

We are an inclusive workplace committed to ‘working from the strength that diversity brings’ reflected in our Statement of Values. We are dedicated to attracting, retaining and developing our people and are committed to inclusive principles. We celebrate the range of diverse assets that



gender identity, ethnicity, sexual orientation, disability, age and life course bring. Applications are encouraged from all sectors of the community. Tell us how we can make this job work for you.

What You'll Do.

- Implement new web-based data management systems – including associated design (software and database), implementation, release planning and data migration activities.
- Work closely with internal (IMOS/AODN) and external stakeholders (domain experts) to perform systems analysis tasks - requirements gathering, user interface and system design.
- Develop systems in line with defined architectures and established organisational practices.
- Work with other members of the IMOS/AODN and external stakeholders on system design, delivery, transition and maintenance.
- Document work done including code, develop manuals for the use of systems and document processes and procedures where appropriate.
- Undertake other duties as assigned by the supervisor.

What We're Looking For (success criteria)

- Tertiary qualification in Computer Science (or similar) with relevant experience or equivalent extensive experience.
- Significant experience developing and maintaining REST APIs and database persistence mechanisms using Java (preferably using Spring).
- Experience with open source geospatial applications such as GeoServer and Geonetwork.
- Experience with cloud computing environments such as AWS.
- Demonstrated background in database design and implementation preferably using PostgreSQL & PostGIS.
- Demonstrated methodical approach to development and documentation of software and systems.
- Well-developed oral and written communication skills and demonstrated ability to communicate with a diverse range of people and work flexibly and proactively as a member of a team.

University of Tasmania

The University of Tasmania is an institution with an enduring commitment to our state and community, and a strong global outlook. We are committed to enhancing the intellectual, economic, social and cultural future of Tasmania. Our [Strategic Direction](#) strongly reflects the University community's voice that our University must be place based but globally connected as well as regionally networked and designed to deliver quality access to higher education for the whole State.

We believe that from our unique position here in Tasmania we can impact the world through the contributions of our staff, students and graduates. We recognise that achieving this vision is dependent on the people we employ, as well as creating a university that is values-based, relational, diverse, and development-focused.

Check out more here:

<https://www.utas.edu.au/jobs>

<https://www.utas.edu.au/careers/our-people-values-and-behaviours>

The intention of this position description is to highlight the most important aspects, rather than to limit the scope or accountabilities of this role. Duties above may be altered in accordance with the changing requirements of the position.

