



A NEW OUTLOOK FOR YOUR CAREER

Senior Developer, Foundational Technologies Executive Level 1

JOB REFERENCE NUMBER	60016194
CLASSIFICATION	Executive Level 1 (Senior Professional Officer Grade C or Research Scientist) Classification will be determined on the skills and experience of the successful applicant
GROUP	Science & Innovation
PROGRAM	Research to Operations
LOCATION	Melbourne – other State & Territory capital city locations may be considered subject to negotiation
STATUS	Ongoing
WORKING HOURS	Both full time and part time will be considered
SALARY RANGE	\$98,209 to \$110,623, plus an additional 15.4% superannuation
CLOSING DATE	11:30pm AEST/AEDT Sunday 25 th October 2020
APPLICANTS	Australian Citizenship – see Eligibility Requirements
CONDITIONS	The successful applicant may be required to obtain, and maintain, a Negative Vetting Level 1 Security Clearance from the Australian Government Security Vetting Agency (AGSVA)
CONTACT OFFICER	Christopher Down, Manager Research to Operations Foundational Technologies Email: Christopher.down@bom.gov.au



ABOUT US

The Bureau of Meteorology is one of the few organisations that touches the lives of all Australians and all Australia, every day. The Bureau works across Australia and remote islands, providing services from the Antarctic to beyond the equator, and from the Indian Ocean to the Pacific.

We are Australia's national weather, climate and water agency, in the Agriculture, Water and Environment portfolio of the Australian Government, operating under the authority of the Meteorology Act 1955 and the Water Act 2007. We provide data, information, knowledge, insight and wisdom to help Australians prepare and respond to the realities of their natural environment, including droughts, floods, fires, storms, tsunami and tropical cyclones.

Our products and services include observations, forecasts, analysis and advice covering Australia's atmosphere, water, oceans and space environments. We undertake focussed scientific research in support of our operations and services. Through regular forecasts, warnings, monitoring and advice, we provide one of Australia's most fundamental and widely used public services.

We have strong relationships with our customers, partners and stakeholders in Australia, including the Australian Community and the emergency services sectors, all-levels of Government, and focus sectors including aviation, agriculture, energy and resources, national security and water.





WORKING AT THE BUREAU

The Bureau represents a dynamic and exciting opportunity. A role with the Bureau involves:

OUR WORK	OUR PEOPLE	OUR ENVIROMENT	OUR EXPIERIENCE
Purpose-driven impactful work that brings real benefit to the Australian Community, businesses and industry.	A deeply passionate and highly skilled workforce that continuously challenges the status quo to achieve greater impact and experiences for our colleagues and customers.	A world class organisation with excellent workplaces in great locations, access to cutting-edge technology and a safe and inclusive environment for everyone.	A commitment to professional development and growth, backed by clear career pathways and training opportunities, and complimented by a competitive remuneration package.

POSITION OVERVIEW

The Bureau of Meteorology is undergoing a significant transformation to deliver a more customer-centric, unified and resilient national operation. This is an exciting new strategic direction which will revolutionise the way the Bureau researches, develops and delivers services to Australian communities.

This position will be a key role in the new Research to Operations (R2O) Program within the Foundational Technologies Team. The role will be responsible for assisting the Program in delivering modelling systems, new applications, and focused products for our customers.

The Foundational Technologies Team's primary charge is to build and maintain tools, libraries, model components and IT services that are shared across R2O activities, improve infrastructure systems to reduce overheads in research to operations implementations, and support infrastructure system development for operational systems.

The R2O Program will increase the efficiency of the Bureau's research to operations pipeline. It will improve the development and delivery of operational prediction systems that are better aligned to customer needs. It will also provide a step-change in collaboration and coordination for staff formerly working across the Bureau on developing operational prediction systems.

ROLE RESPONSIBILITIES

The successful candidate will provide application development, configuration, and maintenance in support of specialised computing systems and applications, including in secure High Performance Computing (HPC) environments. Working closely with the other teams in R2O, develop and maintain standardised coding practices including testing, procedures, validation and verification, and surety.

Assist project work undertaken by the Science and Innovation Group in transitioning research candidates into operations for marine, climate, weather and water.

Comply with all Bureau work, health and safety policies and procedures, and taking reasonable care for your own health and safety and that of employees, contractors and visitors who may be affected by your conduct.



A day in this role might include:

- Develop components of new environmental modelling and post-processing systems
- Take a lead role in innovating with new technologies for environmental and post-processing systems
- Assist in building up Program wide expertise in program design, coding standards, test driven development, and adoption of new technologies
- Support the Program in troubleshooting and reviewing code, and system and application design
- Assist in administration of Linux and Virtual Machines for Research and R2O

To be successful in the role you will display:

- A track record in contributing to and building applications for complex systems. A background in weather, climate, marine or water modelling in secure HPC environments would be highly regarded.
- Proven experience in researching and adapting new technologies to complex applications development.
- Demonstrated ability to transfer knowledge and expertise to colleagues across a large Program. Proven capability to coach, develop and mentor individuals.
- Experience in designing and implementing new applications with hands on debugging and maintenance of a complex code base.
- A demonstrated use and understanding of Linux and a capability to administer and maintain compute systems.

SELECTION CRITERIA

The Bureau encourages applications from all suitably qualified candidates. Applications will be considered based on alignment with selection criteria, which have been matched to the APSC Work Level Standard and Integrated Leadership Systems for Executive Level 1 positions.

Software engineering

- Demonstrated expertise in software engineering, including requirements gathering and software design, construction, validation and optimisation.
- Demonstrated experience with automated testing, continuous integration and containerisation tools.
- An ability to foster improved software development practices within teammates.

Software development

- Demonstrated expertise in writing computer software within a Linux environment for deployment within a demanding real-time operational environment is essential.
- Demonstrated expertise with multi-threaded Python, C and C++ is essential.
- Experience with the Fortran language would be desirable.

Scientific development

- Ability to devise and present innovative practical solutions to problems, showing flexibility and creativity.
- Ability to construct software in a research or prototyping environment, working with scientific data and concepts.
- Experience in implementing scientific algorithms to efficiently process large geophysical data sets would be an advantage.



Communication and liaison skills

- Excellent interpersonal, communication and stakeholder engagement skills.
- Demonstrated ability to gather and interpret user requirements.
- Proven ability to work independently and as part of a team to achieve team goals.
- Demonstrated initiative and personal drive, with an ability to think and plan such that strategic objectives are achieved.

Diversity and Inclusion

- A good understanding of the Bureau's Commitment to Diversity and Inclusion and the APS Values and Code of Conduct, and commitment to their implementation in the workplace.

Mandatory qualifications:

Senior Professional Officer Grade C - a degree from an Australian educational institution, or a comparable overseas qualification, which is appropriate to the duties; OR other comparable qualifications, which are appropriate to the duties.

Research Scientist - degree of Doctor of Philosophy of an Australian university or a comparable overseas qualification, which is appropriate to the duties; OR other comparable qualifications which are appropriate to the duties

Previous experience with development or delivery of operational weather, climate, marine or water services, the associated technologies and/or related product development and service delivery will be highly regarded.

MERIT POOL

The selection process will establish a merit pool that may be used to fill similar positions within 12 months.

HOW TO APPLY

Applications can be lodged through [BOMCareers](#).

Your application will consist of resume, contact details for two referees and responses to the selection criteria (500 words per criterion):

- position overview
- job responsibilities
- selection criteria
- relevant sections of the [Integrated Leadership System \(ILS\)](#) and [APS work level standards](#).

The Bureau is an equal opportunities employer. We will support applicants with disability through our [RecruitAbility Program](#) and will provide reasonable adjustments such as access, equipment and other practical support at relevant stages of the recruitment process.

We recognise the need for our workforce to reflect the community we serve and provide an inclusive environment that respects and values diversity and is described in our [Diversity and Inclusion Statement of Commitment](#). We strongly encourage qualified applicants from diverse backgrounds to apply.

The Bureau offers flexible working options, reasonable workplace adjustments and an Employee Assistance Program (EAP). Should you have any questions or experience any difficulties with applying online, please contact the Recruitment Team on BOMCareers@bom.gov.au



COVID-19 RESTRICTIONS

We understand there are unique and evolving challenges due to the current COVID-19 pandemic. The Bureau is responsive and making changes to ensure the safety of all candidates and our team.

Under the relevant legislation and guidance of the National Chief Medical Officer:

- Currently all interviews will be held via audio/video conference (across a range of platforms to accommodate personal requirements) unless otherwise advised.
- The successful candidate may be required to carry out the duties remotely for either a period or until otherwise advised.

ADDITIONAL INFORMATION

To find out more about the employment conditions at the Bureau, please refer to the Bureau of Meteorology [Enterprise Agreement 2018](#).