Australian Government
Bureau of Meteorology

Forecast Systems Programmer

Job Details

Reference:	14208
Classification:	APS Level 6 (Information Technology Officer Grade 2) or Executive Level 1 (Senior Information Technology Officer Grade C)
Salary range:	$92,560 - $104,260 (EL1) & $76,025 - $86,438 (APS6), plus an additional 15.4% superannuation
Location:	700 Collins Street, Docklands, Melbourne 3008
Division:	Environment and Research
Branch:	Research and Development
Section:	Weather and Environmental Prediction
Sub Section:	Forecast Systems
Status:	Non-ongoing Specified Task until 31 May 2019
Applicants:	Australian Citizenship – see Eligibility Requirements
Conditions:	The classification offered will match the skills and experience of the successful candidate.
	Interstate applicants will be considered provided appropriate working arrangements can be organised in their capital city Regional Office. Interstate applicants wanting to relocate to Melbourne may submit their applications on the basis that they are prepared to fund their own travel and relocation costs.
Applications close:	Thursday 22 June 2017

Advertisement

The Research and Development branch is seeking a talented software developer for its Weather and Environmental Prediction program. This is an opportunity to be a part of a high-performing team which has a major public impact, recognised by several technology awards. It is a chance to work with skilled software engineers and scientists collaborating in a multi-disciplinary effort. Modern tools and practices such as git, automated testing and code reviews are utilised. Professional development opportunities relevant to the work may be available.

You will be a key member of a 6 to 9 person team of scientists and software developers that builds, develops and supports systems for weather forecast production. The scope includes work on the Graphical Forecast Editor (GFE) component of the Bureau's NexGen Forecast and Warning System. The focus of this work is on development of tools that will support higher quality and more efficient production of routine weather forecasts. This will include using your software engineering abilities in Python and familiarity with Linux platforms to help the team evaluate the efficacy of improved forecast processes through the development of verification libraries and data handling.

This is a great opportunity to work on meaningful software applications for the public good, in a research environment with a commitment to innovation and quality.

Duty Statement (Executive Level 1)

Under limited direction,

1. take responsibility for advanced computer software design and development within the Research and Development branch;

2. undertake data processing, statistical analysis and systems support;

3. cultivate and maintain effective working relationships with project stakeholders, programme managers and senior staff;

4. influence team strategic directions; prepare plans, reports and technical papers; contribute to research on new software tools and techniques;

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

6. be aware of, and apply as necessary, the principles and practices of the various elements of the Bureau's Social Justice Strategy.

Duties representing highest function: 1, 2

Immediate Supervisor: SENIOR PROFESSIONAL OFFICER B (MET.) (NO.11001)

Duty Statement (APS Level 6)

Under general direction,

1. undertake advanced computer software development within the Research and Development branch;

2. undertake data processing, statistical analysis and systems support;

3. liaise with project stakeholders as required;

4. prepare plans, reports and technical papers; contribute to research on new software tools and techniques;

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

6. be aware of, and apply as necessary, the principles and practices of the various elements of the Bureau's Social Justice Strategy;

Duties representing highest function: 1, 2

Immediate Supervisor: SENIOR PROFESSIONAL OFFICER B (MET.) (NO.11001)

Job Profile

The position is for a software developer to be a member of a small team that builds, develops and supports software systems for weather forecast production. The scope includes significant aspects of the Graphical Forecast Editor (GFE) component of the Bureau's NexGen Forecast and Warning System, which runs on the Linux operating system. The work will include development of large-volume data handling and analysis software in Python to support verification of GFE forecast process automation and guidance efficacy. It will also include research on operational forecasting tools and techniques.

Selection Criteria

Applicants are required to address the selection criteria. Responses to the selection criteria should be limited to a maximum of 500 words per criterion. For information on how to address the selection criteria refer to A Guide on Addressing Selection Criteria for Applicants.

1. **Software engineering**
   Demonstrated ability in software development including expertise in Python. Has written robust code of a suitable standard for deployment in operational settings. Knowledge of software architecture design and of software engineering principles. Demonstrated expertise with Linux systems and familiarity with open source development tools and utilities. Expertise with version control, large code-bases and automated testing.

2. **Algorithm development and data handling**
   Demonstrated ability to work with and develop complex algorithms. Demonstrated ability to work with high-volume numerical data, undertake basic evaluation of results, and present outputs in graphical and other appropriate formats. Knowledge of data visualisation techniques would be an advantage, as would knowledge of scientific Python libraries and experience working in a scientific, engineering or statistical environment.

3. **Working to deadlines and problem solving**
   Demonstrated ability to plan to achieve objectives and deadlines. Expertise with problem diagnosis and maintenance of complex software applications. Ability to work independently and seek help when required.

4. **Communication skills and teamwork**
   Demonstrated ability to communicate clearly through both verbal and written means. Proven ability to work effectively in a multidisciplinary team and to collaborate in specifying, writing and reviewing software code.

5. **Social Justice**
   A knowledge and understanding of the principles of the Bureau's Social Justice Strategy and a demonstrated commitment to apply them in practice.

Mandatory Requirements

A degree or diploma from an Australian educational institution, or a comparable overseas qualification, which is appropriate to the duties.

Contact

If you would like to know more about the Bureau of Meteorology visit http://www.bom.gov.au/.

Employment conditions for most Bureau employees are contained in The Bureau of Meteorology Enterprise Agreement 2011–2014.

Please read the selection documentation and if you have any queries specific to this position please contact Michael Foley on 03 9669 4241 or email michael.foley@bom.gov.au.

How to Apply

Applications are to be lodged online through the Bureau of Meteorology eRecruit system by the closing date.

The eRecruit system is easy to use and will prompt you on how to register and apply for vacancies.

Prior to lodging your application online we recommend you:

▪ Read the position information contained in the Job Details document.
▪ Have a current resume which details relevant employment experience, skills and qualifications.
▪ Prepare a statement specifically addressing the Selection Criteria for the position.

When applying online:

▪ Please respond to all the online questions, complete your responses to the selection criteria and upload a copy of your resume.
▪ Regularly click save during the online process to ensure your application is saved. If there is no activity for a set period of time the online application process will time out and automatically disconnect you.
▪ We recommend you prepare your answers to the criteria in a word document then copy and paste your responses into the eRecruit system.
▪ Your resume should be in a Word or PDF format.

For further information on our recruitment process and how to apply refer to our careers website http://www.bom.gov.au/careers/.

Should you experience any difficulties with accessing the eRecruit system and applying online, please contact the Recruitment Unit by email jobs@bom.gov.au or phone 03 9669 4401.