

Position Description

College/Division:	ANU College of Engineering & Computer Science
Faculty/School/Centre:	Research School of Electrical, Energy and Materials Engineering (RSEEME)
Department/Unit:	Battery Storage and Grid Integration Program
Position Title:	Software Developer
Classification:	ANU Officer Grade 7 (Information Technology)
Position No:	TBC
Responsible to:	Lead Software Developer, Battery Storage and Grid Integration Program
Number of positions that report to this role:	0
Delegation(s) Assigned:	None

PURPOSE STATEMENT:

The ANU College of Engineering and Computer Science is dedicated to contributing to The Australian National University's reputation for excellence in research and research-led education. The College is at the leading edge within numerous fields, including logic, algorithms and data, signal processing, artificial intelligence, computer vision and robotics, computational mechanics, materials, fabrication, big software systems, renewable energy, networked systems and quantum cybernetics.

The Battery Storage and Grid Integration Program is an industry focused R&D initiative based at the Australian National University (ANU). The Software Developer forms part of the team responsible for developing, deploying and maintaining software capabilities and systems to support research, projects and activities within the Program. In particular, the software developer will work as part of a project team to deliver capabilities that will contribute to the coordination and orchestration of distributed generation, storage and electric vehicles in the Australian electricity system.

KEY ACCOUNTABILITY AREAS:

Position Dimension & Relationships:

The Software Developer reports to the Lead Software Developer and works closely with both academic and professional staff members of the Battery Storage and Grid Integration Program within the Research School of Electrical, Energy and Material Engineering (RSEEME), researchers in other ANU colleges and external stakeholders such as research partners and clients from industry and government.

Role Statement:

Under the broad direction of the Lead Software Developer, the Software Developer will:

1. Develop, maintain and enhance software systems required by the Program.
2. Provide input into the analysis, design, and development of new software systems in line with the project requirements of the Program.
3. Create and maintain documentation to support the Program's software development requirements.
4. Ensure that appropriate coding standards, guidelines and methodologies are adhered to.
5. Provide advice and technical support through the investigation, resolution and tracking of software issues.
6. Comply with all ANU policies and procedures, and in particular those relating to work health and safety and equal opportunity.
7. Other duties as consistent with the classification of the position and in line with the principles of multi-skilling.

SELECTION CRITERIA:

1. A degree in Engineering, Physics, Mathematics or related discipline; or an equivalent combination of experience and education/training.
2. Demonstrated experience and competence in software development preferably including C++ and python, familiarity with the Linux operating system, and demonstrated experience of modern software development paradigms and practices.
3. Demonstrated experience in writing efficient and high-performance commercial or research software.
4. Experience and expertise in power systems, optimisation, data analysis, machine learning or control systems is desirable, as is prior experience in the energy industry. Experience in implementing front-end systems would be beneficial.
5. Demonstrated ability to work independently and as a productive member of a team with minimal supervision.
6. Well developed interpersonal and liaison skills and the demonstrated ability to work productively and proactively with academic, technical and professional staff in a dynamic research environment.
7. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

Supervisor Signature:		Date:	December 2018
Printed Name:	Lachlan Blackhall	Uni ID:	



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Pre-Employment Work Environment Report

Position Details

College/Div/Centre	CECS	Dept/School/Section	RSEEME
Position Title	Software Developer	Classification	ANU07 (IT)
Position No.		Reference No.	

In accordance with the Occupational Health and Safety Act 1991 the University has a duty of care to provide a safe workplace for all staff.

- This form must be completed by the supervisor of the advertised position and forwarded with the job requisition to Appointments and Promotions Branch, Human Resources Division. Without this form jobs cannot be advertised.
- This form is used to advise potential applicants of work environment issues prior to application.
- Once an applicant has been selected for the position consideration should be given to their inclusion on the University's Health Surveillance Program where appropriate – see. http://info.anu.edu.au/hr/OHS/Health_Surveillance_Program/index.asp
Enrolment on relevant OHS training courses should also be arranged – see http://info.anu.edu.au/hr/Training_and_Development/OHS_Training/index.asp
- 'Regular' hazards identified below must be listed as 'Essential' in the Selection Criteria - see 'Employment Medical Procedures' at http://info.anu.edu.au/Policies/_DHR/Procedures/Employment_Medical_Procedures.asp

Potential Hazards

<ul style="list-style-type: none"> Please indicate whether the duties associated with appointment will result in exposure to any of the following potential hazards, either as a regular or occasional part of the duties. 					
TASK	regular	occasional	TASK	regular	occasional
key boarding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	laboratory work	<input type="checkbox"/>	<input type="checkbox"/>
lifting, manual handling	<input type="checkbox"/>	<input type="checkbox"/>	work at heights	<input type="checkbox"/>	<input type="checkbox"/>
repetitive manual tasks	<input type="checkbox"/>	<input type="checkbox"/>	work in confined spaces	<input type="checkbox"/>	<input type="checkbox"/>
catering / food preparation	<input type="checkbox"/>	<input type="checkbox"/>	noise / vibration	<input type="checkbox"/>	<input type="checkbox"/>
fieldwork & travel	<input type="checkbox"/>	<input type="checkbox"/>	electricity	<input type="checkbox"/>	<input type="checkbox"/>
driving a vehicle	<input type="checkbox"/>	<input type="checkbox"/>			
NON-IONIZING RADIATION			IONIZING RADIATION		
Solar	<input type="checkbox"/>	<input type="checkbox"/>	gamma, x-rays	<input type="checkbox"/>	<input type="checkbox"/>
ultraviolet	<input type="checkbox"/>	<input type="checkbox"/>	beta particles	<input type="checkbox"/>	<input type="checkbox"/>
infra red	<input type="checkbox"/>	<input type="checkbox"/>	nuclear particles	<input type="checkbox"/>	<input type="checkbox"/>
Laser	<input type="checkbox"/>	<input type="checkbox"/>			
radio frequency	<input type="checkbox"/>	<input type="checkbox"/>			
CHEMICALS			BIOLOGICAL MATERIALS		
hazardous substances	<input type="checkbox"/>	<input type="checkbox"/>	microbiological materials	<input type="checkbox"/>	<input type="checkbox"/>
allergens	<input type="checkbox"/>	<input type="checkbox"/>	potential biological allergens	<input type="checkbox"/>	<input type="checkbox"/>
cytotoxics	<input type="checkbox"/>	<input type="checkbox"/>	laboratory animals or insects	<input type="checkbox"/>	<input type="checkbox"/>
mutagens/teratogens/	<input type="checkbox"/>	<input type="checkbox"/>	clinical specimens, including blood	<input type="checkbox"/>	<input type="checkbox"/>
carcinogens	<input type="checkbox"/>	<input type="checkbox"/>	genetically-manipulated specimens	<input type="checkbox"/>	<input type="checkbox"/>
pesticides / herbicides	<input type="checkbox"/>	<input type="checkbox"/>	immunisations	<input type="checkbox"/>	<input type="checkbox"/>
OTHER POTENTIAL HAZARDS (please specify):				<input type="checkbox"/>	<input type="checkbox"/>

Supervisor's Signature:		Print Name:	Lachlan Blackhall	Date:	22 October 2018
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**Australian
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Position Description

College/Division:	ANU College of Engineering and Computer Science
Faculty/School/Centre:	Research School of Electrical, Energy and Materials Engineering (RSEEME)
Department/Unit:	Battery Storage and Grid Integration Program
Position Title:	Senior Software Developer
Classification:	ANU Officer Grade 8 (Information Technology)
Position No:	TBC
Responsible to:	Lead Software Developer, Battery Storage and Grid Integration Program
Number of positions that report to this role:	0
Delegation(s) Assigned:	None

PURPOSE STATEMENT:

The ANU College of Engineering and Computer Science is dedicated to contributing to The Australian National University's reputation for excellence in research and research-led education. The College is at the leading edge within numerous fields, including logic, algorithms and data, signal processing, artificial intelligence, computer vision and robotics, computational mechanics, materials, fabrication, big software systems, renewable energy, networked systems and quantum cybernetics.

The Battery Storage and Grid Integration Program is an industry focused R&D initiative based at the Australian National University (ANU). The Senior Software Developer forms part of the team responsible for developing, deploying and maintaining software capabilities and systems to support research, projects and activities within the Program. In particular, the software developer will work as part of a project team to deliver capabilities that will contribute to the coordination and orchestration of distributed generation, storage and electric vehicles in the Australian electricity system.

KEY ACCOUNTABILITY AREAS:

Position Dimension & Relationships:

The Senior Software Developer reports to the Lead Software Developer and works closely with both academic and professional staff members of the Battery Storage and Grid Integration Program within the Research School of Electrical, Energy and Material Engineering (RSEEME), researchers in other ANU colleges and external stakeholders such as research partners and clients from industry and government.

Role Statement:

Under the broad direction of the Lead Software Developer, and working with a high degree of autonomy, the Senior Software Developer will:

1. Develop, maintain and enhance software systems required by the Program.
2. Provide significant input into and lead the analysis, design, and development of new software systems in line with the project requirements of the Program.
3. Create and maintain documentation to support the Program's software development requirements.
4. Ensure that appropriate coding standards, guidelines and methodologies are adhered to.
5. Provide high level advice and technical support through the investigation, resolution and tracking of software issues.
6. Contribute expert knowledge on the intersection of engineering, computing sciences and electricity smart grids.
7. Train and mentor other members of the team, and staff within the School, broader University and externally.
8. Liaise with external partners and stakeholders in the design and delivery of solutions in collaborative

projects.

9. Comply with all ANU policies and procedures and in particular those relating to work health and safety and equal opportunity;
10. Other duties consistent with the classification of the position.

SELECTION CRITERIA

1. Progress towards Postgraduate qualifications in Engineering, Physics, Mathematics or related discipline or an extensive equivalent combination of experience and education/training.
2. Demonstrated extensive experience and competence in software development preferably including C++ and python, familiarity with the Linux operating system, and demonstrated experience of modern software development paradigms and practices.
3. Demonstrated extensive experience in writing efficient and high-performance commercial or research software.
4. Demonstrated extensive experience with supporting data-intensive scientific research and in handling of large data, preferably including experience in data visualisation. Experience in implementing front-end systems would be beneficial.
5. Extensive experience and expertise in power systems, optimisation, data analysis, machine learning or control systems is desirable, as is prior experience in the energy industry.
6. Demonstrated ability to self-initiate work in the context of team objectives.
7. Well developed interpersonal and liaison skills and the demonstrated ability to work productively and proactively with academic, technical and professional staff in a dynamic research environment.
8. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

Supervisor/Delegate Signature:		Date:	
Printed Name:	Lachlan Blackhall	Uni ID:	

References:

[General Staff Classification Descriptors](#)

[Academic Minimum Standards](#)



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Pre-Employment Work Environment Report

Position Details

College/Div/Centre	CECS	Dept/School/Section	RSEEME
Position Title	Senior Software Developer	Classification	ANUO8 (IT)
Position No.		Reference No.	

In accordance with the Occupational Health and Safety Act 1991 the University has a duty of care to provide a safe workplace for all staff.

- This form must be completed by the supervisor of the advertised position and forwarded with the job requisition to Appointments and Promotions Branch, Human Resources Division. Without this form jobs cannot be advertised.
- This form is used to advise potential applicants of work environment issues prior to application.
- Once an applicant has been selected for the position consideration should be given to their inclusion on the University's Health Surveillance Program where appropriate – see . http://info.anu.edu.au/hr/OHS/___Health_Surveillance_Program/index.asp
Enrolment on relevant OHS training courses should also be arranged – see http://info.anu.edu.au/hr/Training_and_Development/OHS_Training/index.asp
- 'Regular' hazards identified below must be listed as 'Essential' in the Selection Criteria - see ' Employment Medical Procedures' at http://info.anu.edu.au/Policies/_DHR/Procedures/Employment_Medical_Procedures.asp

Potential Hazards

<ul style="list-style-type: none"> Please indicate whether the duties associated with appointment will result in exposure to any of the following potential hazards, either as a regular or occasional part of the duties. 					
TASK	regular	occasional	TASK	regular	occasional
key boarding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	laboratory work	<input type="checkbox"/>	<input checked="" type="checkbox"/>
lifting, manual handling	<input type="checkbox"/>	<input type="checkbox"/>	work at heights	<input type="checkbox"/>	<input type="checkbox"/>
repetitive manual tasks	<input type="checkbox"/>	<input type="checkbox"/>	work in confined spaces	<input type="checkbox"/>	<input type="checkbox"/>
catering / food preparation	<input type="checkbox"/>	<input type="checkbox"/>	noise / vibration	<input type="checkbox"/>	<input type="checkbox"/>
fieldwork & travel	<input type="checkbox"/>	<input type="checkbox"/>	electricity	<input type="checkbox"/>	<input type="checkbox"/>
driving a vehicle	<input type="checkbox"/>	<input type="checkbox"/>			
NON-IONIZING RADIATION			IONIZING RADIATION		
solar	<input type="checkbox"/>	<input type="checkbox"/>	gamma, x-rays	<input type="checkbox"/>	<input type="checkbox"/>
ultraviolet	<input type="checkbox"/>	<input type="checkbox"/>	beta particles	<input type="checkbox"/>	<input type="checkbox"/>
infra red	<input type="checkbox"/>	<input type="checkbox"/>	nuclear particles	<input type="checkbox"/>	<input type="checkbox"/>
laser	<input type="checkbox"/>	<input type="checkbox"/>			
radio frequency	<input type="checkbox"/>	<input type="checkbox"/>			
CHEMICALS			BIOLOGICAL MATERIALS		
hazardous substances	<input type="checkbox"/>	<input type="checkbox"/>	microbiological materials	<input type="checkbox"/>	<input type="checkbox"/>
allergens	<input type="checkbox"/>	<input type="checkbox"/>	potential biological allergens	<input type="checkbox"/>	<input type="checkbox"/>
cytotoxics	<input type="checkbox"/>	<input type="checkbox"/>	laboratory animals or insects	<input type="checkbox"/>	<input type="checkbox"/>
mutagens/teratogens/ carcinogens	<input type="checkbox"/>	<input type="checkbox"/>	clinical specimens, including blood	<input type="checkbox"/>	<input type="checkbox"/>
pesticides / herbicides	<input type="checkbox"/>	<input type="checkbox"/>	genetically-manipulated specimens	<input type="checkbox"/>	<input type="checkbox"/>
			immunisations	<input type="checkbox"/>	<input type="checkbox"/>
OTHER POTENTIAL HAZARDS (please specify):					

Supervisor's Signature:		Print Name:		Date:	
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Position Description

College/Division:	ANU College of Engineering & Computer Science
Faculty/School/Centre:	Research School of Electrical, Energy and Materials Engineering (RSEEME)
Department/Unit:	Battery Storage and Grid Integration Program
Position Title:	Expert Software Developer
Classification:	ANU Senior Manager 1 (IT)
Position No:	TBC
Responsible to:	Head, Battery Storage and Grid Integration Program
Number of positions that report to this role:	TBC
Delegation(s) Assigned:	D8

PURPOSE STATEMENT:

The ANU College of Engineering and Computer Science is dedicated to contributing to The Australian National University's reputation for excellence in research and research-led education. The College is at the leading edge within numerous fields, including logic, algorithms and data, signal processing, artificial intelligence, computer vision and robotics, computational mechanics, materials, fabrication, big software systems, renewable energy, networked systems and quantum cybernetics.

The Battery Storage and Grid Integration Program is an industry focused R&D initiative based at the Australian National University (ANU). The Expert Software Developer forms part of the team responsible for developing, deploying and maintaining software capabilities and systems to support research, projects and activities within the Program. In particular, the Expert Software Developer will work as part of a project team to deliver capabilities that will contribute to the coordination and orchestration of distributed generation, storage and electric vehicles in the Australian electricity system.

KEY ACCOUNTABILITY AREAS:

Position Dimension & Relationships:

The Expert Software Developer works under broad direction of the Program Head, and provides leadership in software system design, development, testing, and validation for approved technical projects and activities. Following best-practice technical management procedures, the Expert Software Developer will ensure optimal results for complex, multi-disciplinary software projects, often within the framework of international consortia, and maintain a close working relationship with the internal and external stakeholders of the Program. The Expert Software Developer will maintain a high level of awareness of state-of-the-art technology in the software engineering field and may be required to function in a matrix project management structure under the daily direction of external project manager(s).

Role Statement:

Under broad direction, the Expert Software Developer will:

1. Contribute to the design and management of research and development for complex engineering projects, primarily in the area of smart electricity grids.
2. Develop software that will provide a world-class platform to smart-energy researchers within the College and beyond. Promote this software, and provide support to users, in the form of training material, seminars, workshops, etc.
3. Provide strategic and technical advice to the Battery Storage and Grid Integration Program and others, in developing, integrating and using software related to smart electricity grids.
4. Liaise with external partners and clients involved in collaborative research projects, semi-commercial trials, and commercial spin-offs.
5. Assist with, or initiate, the efforts to secure new projects and funding opportunities.

6. Provide effective leadership, management and recruitment of developers supporting projects in the area of smart electricity grids.
7. Comply with all ANU policies and procedures, in particular those relating to work health and safety and equal opportunity
8. Perform other duties as required, consistent with the classification of the position and in line with the principle of multi-skilling

SELECTION CRITERIA:

1. A postgraduate qualification in Engineering, Physics, Mathematics or related discipline plus relevant practical experience OR an equivalent combination of extensive relevant experience and/or education/training.
2. Demonstrated extensive knowledge of and experience with, a range of computer languages including C++ and python, familiarity with the Linux operating system, and demonstrated experience of modern software development paradigms and practices.
3. Demonstrated capacity to design, develop and successfully deliver scientific, mathematical or computational software, at a high level and in areas relevant to simulation and optimisation of smart electricity grids
4. Excellent knowledge and experience in one or more fields related to smart electricity grids, mathematical optimisation, and simulation. Proven ability to conduct research and development in any of these fields. Experience in implementing front-end systems would be beneficial.
5. Demonstrated ability to work with a high degree of autonomy and to set and monitor own work objectives within set resource limits and deadlines; as well as the ability to supervise, mentor and train junior members of staff.
6. Well developed interpersonal and liaison skills with the demonstrated ability to work effectively as a team member and a proven ability to set priorities, meet deadlines and to quickly adapt to new environments.
7. A demonstrated high-level of understanding of equal opportunity principles and a commitment to the application of EO policies in a university context.

Supervisor Signature:		Date:	August 2019
Printed Name:	Lachlan Blackhall	Uni ID:	

References:

[General Staff Classification Descriptors](#)

[Academic Minimum Standards](#)



Australian
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Pre-Employment Work Environment Report

Position Details

College/Div/Centre	CECS	Dept/School/Section	Battery Storage and Grid Integration
Position Title	Expert Software Developer	Classification	SM1
Position No.		Reference No.	

In accordance with the Work Health and Safety Act 2011 (Cth) the University has a duty to provide a safe workplace.

- This form must be completed by the Supervisor of the advertised position and forwarded with the job requisition to Recruitment and Appointments Branch, Human Resources Division. Without this form jobs cannot be advertised.
- This form is used to advise potential applicants of work environment hazards prior to application.
- Once an applicant has been selected for the position consideration should be given to their inclusion on the University's Health Surveillance Program where appropriate – see [Health Surveillance Procedure](#)
- Enrolment on relevant Work, Health and Safety (WHS) training courses should also be arranged – see [WHS Training & Induction](#)
- Consideration should be given as to whether 'Regular' hazards identified below should be listed as 'Essential' in the Selection Criteria

Potential Hazards

- Please indicate whether the duties associated with appointment will result in exposure to any of the following potential hazards, either as a **regular** or **occasional** part of the duties.

TASK	regular	occasional	TASK	regular	occasional
keyboarding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	laboratory work	<input type="checkbox"/>	<input type="checkbox"/>
lifting, manual handling	<input type="checkbox"/>	<input type="checkbox"/>	work at heights	<input type="checkbox"/>	<input type="checkbox"/>
repetitive manual tasks	<input type="checkbox"/>	<input type="checkbox"/>	work in confined spaces	<input type="checkbox"/>	<input type="checkbox"/>
catering / food preparation	<input type="checkbox"/>	<input type="checkbox"/>	noise / vibration	<input type="checkbox"/>	<input type="checkbox"/>
fieldwork & travel	<input type="checkbox"/>	<input type="checkbox"/>	electricity	<input type="checkbox"/>	<input type="checkbox"/>
driving a vehicle	<input type="checkbox"/>	<input type="checkbox"/>			
NON-IONIZING RADIATION			IONIZING RADIATION		
solar	<input type="checkbox"/>	<input type="checkbox"/>	gamma, x-rays	<input type="checkbox"/>	<input type="checkbox"/>
ultraviolet	<input type="checkbox"/>	<input type="checkbox"/>	beta particles	<input type="checkbox"/>	<input type="checkbox"/>
infra-red	<input type="checkbox"/>	<input type="checkbox"/>	nuclear particles	<input type="checkbox"/>	<input type="checkbox"/>
laser	<input type="checkbox"/>	<input type="checkbox"/>			
radio frequency	<input type="checkbox"/>	<input type="checkbox"/>			
CHEMICALS			BIOLOGICAL MATERIALS		
hazardous substances	<input type="checkbox"/>	<input type="checkbox"/>	microbiological materials	<input type="checkbox"/>	<input type="checkbox"/>
allergens	<input type="checkbox"/>	<input type="checkbox"/>	potential biological allergens	<input type="checkbox"/>	<input type="checkbox"/>
cytotoxics	<input type="checkbox"/>	<input type="checkbox"/>	laboratory animals or insects	<input type="checkbox"/>	<input type="checkbox"/>
mutagens/teratogens/ carcinogens	<input type="checkbox"/>	<input type="checkbox"/>	clinical specimens, including blood	<input type="checkbox"/>	<input type="checkbox"/>
pesticides / herbicides	<input type="checkbox"/>	<input type="checkbox"/>	genetically-manipulated specimens	<input type="checkbox"/>	<input type="checkbox"/>
			immunisations	<input type="checkbox"/>	<input type="checkbox"/>
OTHER POTENTIAL HAZARDS (please specify):					

Supervisor's Signature:		Print Name:		Date:	
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