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| ANU_LOGO_mono black_FA.jpg | Position Description |

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| **College/Division:** | ANU College of Science (COS) |
| **Faculty/School/Centre:**  | Research School of Physics and Engineering (RSPE) |
| **Department/Unit:**  | Applied Mathematics |
| **Position Title:**  | Software Engineer |
| **Classification:** | ANU Officer Grade 7 (Information Technology) |
| **Position No:** |  |
| **Responsible to:** | Head of Department – Applied Mathematics  |
| **Number of positions that report to this role:** | 0 |
| **Delegation(s) Assigned:** | None |

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| **PURPOSE STATEMENT:**The Software Engineer position is located within the Department of Applied Mathematics to support the research and operations of the National Centre for X-ray Micro-Computed Tomography (CTLab) and the imaging group in the development of 3D imaging technology and image analysis tools. There is a need for an Software Developer to develop 3D image analysis and visualisation software in C++ and python and develop data handling scripts in bash and other scripting languages.**KEY ACCOUNTABILITY AREAS:****Position Dimension & Relationships:** The Software Engineer reports directly to the Head of Department and works closely with both academic and professional staff members of the Department of Applied Mathematics within the Research School of Physics and Engineering (RSPE), researchers in the ANU College of Engineering and Computer Science (CECS) and external stakeholders such as research partners and CTLab clients from industry and government. The Engineer will engage with academic, government and industry partners both Australian and international, and support users of the ANU CTLab, including academics, students and visitors.**Role Statement:**Under the broad direction of the Head of the Department, the Software Developer will:* Maintain the CTLab’s information systems, ensuring their suitability for the CTLab’s operational requirements, including upgrades and enhancements
* Provide significant input into the analysis, design, evaluation, and implementation of new software in the areas of data acquisition, visualisation and analysis in line with project requirements of CTLab and the Department.
* Create and maintain documentation to support the CTLab’s information systems.
* Train and mentor other members of the team, and staff within the School, broader University and externally.
* Ensure that enterprise coding standards, guidelines and methodologies are adhered to.
* Install, configure and deploy third party software, including web applications.
* Provide advice and technical support through the investigation, resolution and tracking of software issues within the CTLab’s information systems.
* Comply with all ANU policies and procedures, and in particular those relating to work health and safety and equal opportunity.
* Other duties as consistent with the classification of the position and in line with the principles of multi-skilling.

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| **SELECTION CRITERIA**1. A degree in Computer Science or related discipline; or an equivalent combination of experience and education/training.
2. Experience and competence in all or some of the following software languages and tools: C++, python, VTK, paraview.
3. Demonstrated experience in the acquisition, visualisation or analysis of data.
4. Demonstrated experience in analysing and gathering feature requirements.
5. Demonstrated experience to work independently with minimal supervision, with an ability to understand code written by others quickly and self-sufficiently.
6. Demonstrated ability to work effectively and harmoniously as part of a team, and excellent interpersonal and communication skills to relate effectively and provide guidance to a wide range of people.
7. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context
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| **Supervisor/Delegate Signature:** |  | **Date:** | XX Nov 2018 |
| Printed Name: | Adrian Sheppard | **Uni ID:** | U9204025 |

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| **References:** |
| [General Staff Classification Descriptors](http://info.anu.edu.au/hr/Salaries_and_Conditions/Enterprise_Agreement/2010-2012/Schedule_5) |
| [Academic Minimum Standards](http://info.anu.edu.au/hr/Salaries_and_Conditions/Enterprise_Agreement/2010-2012/Schedule_4) |

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|  | Pre-Employment Work Environment Report |

# Position Details

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| **College/Div/Centre** | COS | **Dept/School/Section** | AM/RSPE |
| **Position Title** | Senior Analyst and 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.

1. 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.
2. This form is used to advise potential applicants of work environment issues prior to application.
3. 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
4. ‘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

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| 1. 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.
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| **TASK** | **regular** |  | **occasional** |  | **TASK** | **regular** |  | **occasional** |
| key boarding | [x]  |  | [ ]  |  | laboratory work | [ ]  |  | [x]  |
| lifting, manual handling | [ ]  |  | [ ]  |  | work at heights | [ ]  |  | [ ]  |
| repetitive manual tasks | [ ]  |  | [ ]  |  | work in confined spaces | [ ]  |  | [ ]  |
| catering / food preparation | [ ]  |  | [ ]  |  | noise / vibration | [ ]  |  | [ ]  |
| fieldwork & travel | [ ]  |  | [ ]  |  | electricity | [ ]  |  | [ ]  |
| driving a vehicle | [ ]  |  | [ ]  |  |  |  |  |  |
| **NON-IONIZING RADIATION** |  |  |  |  | **IONIZING RADIATION** |  |  |  |
| solar | [ ]  |  | [ ]  |  | gamma, x-rays | [ ]  |  | [ ]  |
| ultraviolet | [ ]  |  | [ ]  |  | beta particles | [ ]  |  | [ ]  |
| infra red | [ ]  |  | [ ]  |  | nuclear particles | [ ]  |  | [ ]  |
| laser | [ ]  |  | [ ]  |  |  |  |  |  |
| radio frequency | [ ]  |  | [ ]  |  |  |  |  |  |
| **CHEMICALS** |  |  |  |  | **BIOLOGICAL MATERIALS** |  |  |  |
| hazardous substances | [ ]  |  | [ ]  |  | microbiological materials | [ ]  |  | [ ]  |
| allergens | [ ]  |  | [ ]  |  | potential biological allergens | [ ]  |  | [ ]  |
| cytotoxics | [ ]  |  | [ ]  |  | laboratory animals or insects | [ ]  |  | [ ]  |
| mutagens/teratogens/carcinogens | [ ]  |  | [ ]  |  | clinical specimens, including blood | [ ]  |  | [ ]  |
| pesticides / herbicides | [ ]  |  | [ ]  |  | genetically-manipulated specimens | [ ]  |  | [ ]  |
|  |  |  |  |  | immunisations | [ ]  |  | [ ]  |
| **OTHER POTENTIAL HAZARDS (please specify):** |

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| **Supervisor’s Signature:**  |  | **Print Name:** | **Adrian Sheppard** | **Date:** | **12th Feb 2018** |