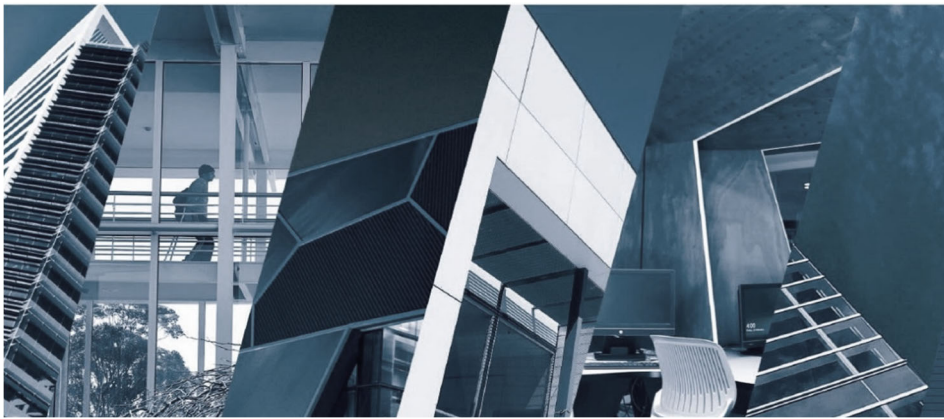


Position Description



| | |
|---------------------------|---|
| Position title: | Research Associate, Digital Sensing |
| School/Directorate /VCO: | School of Engineering, Information Technology and Physical Sciences |
| Campus: | Gippsland, Mt Helen or Berwick Campus. Travel between campuses may be required. |
| Classification: | Academic Level A |
| Time fraction: | Part-time |
| Employment mode: | Fixed-term employment |
| Probationary period: | This appointment is offered subject to the successful completion of a probationary period. |
| Further information from: | Associate Professor Shyh Wei Teng, Deputy Dean Telephone: (03) 5122 6851 Email: shyh.wei.teng@federation.edu.au |
| Recruitment number: | 850680 |

Background

At Federation University, we are driven to make a real difference to the lives of every student, and to the communities we serve.

We are one of Australia's oldest universities, known today for our modern approach to teaching and learning. For 150 years, we have been reaching out to new communities, steadily building a generation of independent thinkers united in the knowledge that they are greater together.

Across our university and TAFE campuses in Ballarat, Berwick, Brisbane, Gippsland, and the Wimmera, we deliver world-class education and facilities. With the largest network of campuses across Victoria, as well as a growing Brisbane base, we are uniquely positioned to provide pathways from vocational education and skills training at Federation TAFE through to higher education.

Portfolio

The School of Engineering, Information Technology and Physical Sciences offers bachelor's degrees in Engineering (Civil, Mechanical, Mechatronics and Mining), Mathematics, Information Technology, and Science (primarily Metallurgy and Geology). The School is in the process of establishing a range of programs in Electrical and Electronic Engineering, Data Science and Industrial Engineering and has an almost unique capability in Australia in that it delivers programs in Geology, Mining, Engineering and Mineral Processing that supports the strong resources sector. The School also offers a number of Graduate Certificate, Graduate Diploma and Masters by coursework programs, with Maintenance and Reliability Engineering being particularly well known internationally. These programs are offered on campus and at a number of locations throughout Australia and overseas.

Position summary

As part of the research team in the School of Engineering, Information Technology and Physical Sciences, the Research Assistant, Digital Sensing will support the delivery of funded research projects, as outlined in the project agreements. The incumbent will also contribute to other research activities related to image processing and machine learning.

The incumbent must be prepared to travel to meet other research partners in Victoria.

Key responsibilities

1. Contribute to delivering the DAWE (Australian Department of Agriculture, Water & the Environment) Traceability Grants Program funded Project (Robust Digital Technology for End-to-End Traceability in Australian Grain Export Supply Chain) – as outlined in the project agreement and plans.
2. Conduct research in image analytics and digital sensing on grain quality testing, as well as produce relevant reports and research outputs in areas of image processing and machine learning.
3. Develop literature reviews and maintain data and knowledge repositories to support research activities in the areas of image processing and machine learning.
4. Prepare research findings leading to publication of peer-reviewed journal papers and the presentation of research findings in a variety of forums.
5. Contribute to the preparation, or where appropriate, individual preparation of research proposals to external funding bodies, as required.
6. Where appropriate, involvement in professional activities such as attendance at appropriate conferences and seminars.
7. Administrative functions primarily connected with their area of research.
8. Associate-supervision, of honours and postgraduate research projects.
9. Attend meetings associated with the research project and relevant School meetings as an active contributor.
10. Contribute to the supervision of honours and/or higher degree by research students.
11. Reflect and embed the University's strategic purpose, priorities and goals when exercising the responsibilities of this position. For a more complete understanding and further information please access the Strategic Plan at: <https://federation.edu.au/about-us/our-university/strategic-plan>.
12. Undertake the responsibilities of the position adhering to:
 - The Staff and Child Safe Codes of Conduct and Conflict of Interest Policy and Procedure;
 - Equal Opportunity and anti-discrimination legislation and requirements;
 - the requirements for the inclusion of people with disabilities in work and study;
 - Occupational Health and Safety (OH&S) legislation and requirements; and
 - Public Records Office of Victoria (PROV) legislation.

Level of responsibility

The Research Assistant, Digital Sensing will work independently in the conduct of research activities and be an active contributor to administrative functions within the School. The incumbent will be mentored and guided by senior academic staff and will be expected to develop their expertise in research and administration with an increasing degree of autonomy.

Training and qualifications

The Research Associate, Digital Sensing will have a degree in Computer Science, Software Engineering, Information Technology, or Applied Mathematics with research experience in Image Processing, and Machine Learning. The incumbent will have sound knowledge in computer programming and professional technical writing. A Master by Research or doctorate degree in Computer Science is desirable.

Position/Organisational relationships

The Research Associate, Digital Sensing will work under the broad direction of the Dean of the School of Engineering, Information Technology and Physical Sciences but will be supervised on a day-to-day basis by the Project Chief Investigator Associate Professor Shyh Wei Teng.

Key selection criteria

Applicants must demonstrate they are able to undertake the inherent responsibilities of the position as contained in the position description and are able to meet the following key selection criteria:

1. The Research Associate, Digital Sensing will have a degree in Computer Science with research experience in Image Processing and Machine Learning. A Master by Research or doctorate degree in Computer Science is desirable.
2. Demonstrated experience in developing image processing and machine learning software as well as using image processing and machine learning toolboxes.
3. Demonstrated experience in preparing and publishing research material including reports, journal and presentations.
4. Demonstrated evidence of research expertise and a demonstrated capacity and preparedness to achieve an active research profile in the field of image processing and machine learning.
5. Demonstrated ability to work collegially as part of a team.
6. Demonstrated interpersonal, oral and written communications skills and an ability to relate well to higher degree students and other University staff.
7. Demonstrated capacity to contribute to the supervision of honours and/or higher degree by research students.
8. Knowledge and understanding of the needs, including learning needs, of a diverse range of students, including those with disabilities.
9. Demonstrated alignment with the University's commitment to child safety.

The University reserves the right to invite applications and to make no appointment.

It is not the intention of the position description to limit the scope or accountabilities of the position but to highlight the most important aspects of the position. The aspects mentioned above may be altered in accordance with the changing requirements of the role.

Key Minimum Standards for Academic Levels (MSALs)**Research academic staff****Level A**

A Level A research academic will typically conduct research/scholarly activities under limited supervision either independently or as a member of a team, and will normally hold a relevant higher degree.

A Level A research academic will normally work under the supervision of academic staff at Level B or above, with an increasing degree of autonomy as the research academic gains skills and experience. A Level A research academic may undertake limited teaching, may supervise at undergraduate levels and may publish the results of the research conducted as sole author or in collaboration. He or she will undertake administration primarily relating to his or her activities at the institution.

The standards are not exhaustive of all tasks in academic employment, which is by its nature multi-skilled and involves an overlap of duties between levels