



## POSITION DESCRIPTION

<b>Position</b>	Research Fellow in 3D Computer Vision		
<b>Position Number</b>	4003A01	<b>Level/ Classification</b>	ACLEB
<b>Reports to</b>	Associate Professor Hamid Laga		
<b>Division</b>	Harry Butler Institute		
<b>College</b>	Research and Innovation		

### Position Purpose

Employed as a Research Fellow, the postdoctoral fellow is expected to carry out scholarly research activities aimed at fulfilling the research goals of the ARC project that funds this position and to develop professional expertise relevant to the profession or discipline. The position is part of the research project “Shape4D: Modelling and Exploring the Spatio-Temporal Deformation Patterns in the 3D Shape of Biological Objects”, funded by the Australian Research Council (ARC) through the Discovery scheme.

### About Murdoch University

Murdoch University helps people discover how to make a difference, through education and research endeavor, and remains one of the most inclusive universities in the country, providing students with quality education and recognised academic standing within an engaging and caring environment. We are a university for all, irrespective of background and social standing with a focus on social equity, self-direction and freedom of thought and belief.

With strong links to government, business and the community, Murdoch University helps people discover how to make a difference. We are a young, innovative and enterprising university with more than 23,000 students and 1,700 staff across Perth, Singapore and Dubai. We are committed to high quality education, innovative research, and strong community engagement both locally and internationally.

Our [Strategic Plan and Future Horizon 2017-2027](#) outlines an ambitious blueprint for development and growth, with a focus on one purpose: to be a creative force for current and future generations.

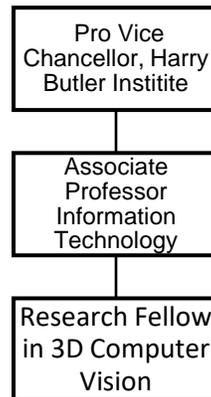
We are clear about our two core goals: to educate free thinkers who thrive in society and are sought after by employers; and, to provide life changing solutions for the world’s big challenges through our outstanding translational research and innovative practice.

### About the Work Area

The Harry Butler Institute is one of the three Murdoch University institutes that bring together leading researchers from across the University to deliver world class multidisciplinary/interdisciplinary translational research that benefits government, industry and the community. The Harry Butler Institute brings together all of the disciplines that contribute to the coexistence of business and biodiversity in order that society can create maximum value for the community whilst simultaneously safeguarding the environment.

The primary objective of the Harry Butler Institute is to give expression and recognition to the legacy of Dr Harry Butler in world-class science, education and environmental management ‘...you can have conservation with development...’ (Harry Butler, 2015).

### Reporting Relationships



### Key Responsibilities / Duties

1. Conduct high-quality research, both independently and in collaboration with the project team, aimed at fulfilling the goals of the project.
2. Publish the research findings in high impact research journals and conferences.
3. Supervise, as required, Honors, Masters, and/or PhD students.
4. Work closely and effectively with the members of the research team, including postgraduate research students, in Perth, nationally and internationally, to achieve the project KPIs.
5. Participate in the application for external grant funding.
6. Participate in the University's Contribution Development Review (CDR).
7. Undertake such other duties as determined by the project supervisor.

### Guiding Principles and Values / Code of Ethics and Code of Conduct

The founding principles upon which Murdoch University was established continue unabated today. We continue to be guided by the principles of:

- Equity and Social Justice
- Opportunity
- Sustainability
- Global Responsibility

These Murdoch principles come to life through our culture as evidenced by being an institution where the following are clear:

- Integrity
- Respect and Diversity
- Purpose
- Excellence and Future-focus

All staff will comply with the University's Code of Ethics and Code of Conduct and demonstrate a commitment to its Equity, Diversity and Safety principles and the general capabilities of personal effectiveness, working collaboratively and demonstrating a focus on results.

All Staff are to complete a Contribution Development Review Annually. Details of the University policies on Development Review can be accessed [here](#). A commencing Development Review should be completed within 3 months of commencement.

### **Selection Criteria**

1. A PhD in an area relevant to the appointment (computer science, mathematics, electrical engineering or closely related areas).
2. Expertise in at least two of the following areas, and a willingness and ability to develop expertise in the remaining areas: (statistical) 3D shape analysis, 3D computer vision, 3D geometry processing, machine learning (especially deep learning).
3. Strong programming skills, not only Matlab and Python but also C/C++
4. Demonstrated ability to engage in high quality research independently and in collaboration with others.
5. Demonstrate ability to produce high quality research output, demonstrated by a track record of publications, as a first author, in outlets such as IEEE Transactions on Pattern Analysis and Machine Intelligence, International Journal of Computer Vision, ACM Transactions on Graphics, IEEE Transactions on Visualization and Graphics, Siggraph, Eurographics, IEEE CVPR, IEEE ICCV, and ECCV, among others
6. Demonstrated ability and commitment to successfully supervise honors, postgraduate and HDR students.
7. Demonstrated ability to work under broad direction only, exercise initiative in undertaking responsibilities and work effectively as a team member.
8. Well-developed interpersonal skills and the ability to work effectively as a member of an interdisciplinary and collegial team.
9. Demonstrated high levels of written and oral communication skills in English.

### **Probationary Review**

This position may be subject to a probationary period, during which time the academic staff member is required to meet set probationary objectives and pass a probationary review. Probationary objectives are set following appointment to the position and confirmed at the first Academic Contribution Development Review (ACDR).

### **Academic Career Framework**

Murdoch University's Academic Career Framework provides a transparent, equitable and consistent approach to probation and promotion as well as outcome and workload expectations. Please refer to the Murdoch University Academic Career Framework for performance criteria and expectations for all academic positions.