

WildCount Honours project: Can machine learning be used to accurately identify wildlife in remote camera trap images in a rapidly changing world?

Brief Project Summary:

Motion-active or remote camera traps are now commonly used in wildlife studies around the globe. Machine learning techniques provide a powerful and exciting opportunity to automate image processing; thereby reducing analysis and reporting time. The time gained by implementing an automated image processing pipeline and increase speed of reporting results can be used for on-ground species conservation management. However, due to rapid environmental change, image algorithms may not perform well after major disturbance events to the landscape.

This project will work closely with <u>WildCount</u>, a large-scale wildlife monitoring program run by National Parks and Wildlife Service, NSW Government and the <u>School of Life and Environmental Sciences</u>, University of Sydney. It will test the feasibility of using machine learning algorithms for identifying species in camera trap images and the impacts of the 2019/20 mega-fires on identifying species from images taken from burnt landscapes.



Photographs: Red-necked wallabies (left) and superb lyrebirds (right). Kindly provided by WildCount, NSW National Parks and Wildlife Service.

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