Oakleigh Wilson

University of the Sunshine Coast
School of Science, Engineering, and Technology

oakleigh.wilson05@gmail.com // oakleigh.wilson@research.usc.edu.au
OakAlice.github.io

Research Interests

I am a quantitative ecologist integrating big-data computation into ecological science. I am interested in animal behaviour and have a life-long passion for behaviour and evolutionary psychology. Currently, I focus on developing user-friendly theoretical frameworks and data workflows for utilising machine learning in behavioural biologging research.

Education and Employment

PhD Candidate	2023 -	University of the Sunshine Coast. Optimising the use of machine learning in animal accelerometer behaviour recognition. Advisors: Christofer Clemente, David Schoeman.
Graduate Ecologist	2023 - 2024	Eco Logical Australia. Designing data quality procedures and conducting statistical analyses for government and private sector clients.
Research Assistant	2021 - 2022	University of Queensland. Beta testing procedures and running experiments on participants in psychology Perception research lab.
Science Communication Intern	2021	The Daily Post. Fortnightly science communication articles for a regional newspaper, targeted at a general audience.
Bachelor of Advanced Science, Biology (Hnrs)	2019 - 2022	University of Queensland. Thesis focused on quantifying koala ground-traverse behaviour using GPS and accelerometer behaviour recognition. Advisor: Robbie Wilson.

Awards and Grants

2025	Society of Experimental Biology Conference Travel Grant ($800)
2024	Student Research Grant, Ecological Society of Australia ($1500)
2024	Student Research Grant, Australasian Society for the Study of Animal Behaviour ($2500)
2023	People's Choice Poster Award, ANZSCB Conference
2023	Runner Up Poster Award, SSTE UniSC Student Conference
2021	Evolution Prize, for highest achievement in Evolution course
2021	Summer Research Scholarship, UQ School of Psychology ($3600)
2020	Summer Research Scholarship, UQ School of Biology ($3600)

Publications

Practical guidelines for validation of supervised machine learning models in accelerometer-based animal behaviour classification. **O Wilson**, D Schoeman, A Bradley, C Clemente. (2025) Journal of Animal Ecology. http://doi.org/10.1111/1365-2656.70054

Teaching

2025 -	Teaching Assistant	ANM100 Animal Ecology Field Course (University of the Sunshine Coast)
2024 -	Teaching Assistant	ANM201 Animal Ecophysiology (University of the Sunshine Coast)
2022	Laboratory Lead	BIOL3205 Animal Ecophysiology (University of Queensland)

Invited Seminars

2024	Invited talk. The School of Biomedical Sciences, University of Queensland, Brisbane, Australia.

Volunteering

2025	Media Committee, leading 'ECR Asks' Initiative. Society for Open, Reliable, and Transparent Ecology and Evolutionary biology (SORTEE)
2021-2023	Secretary and then President. University of Queensland Social Running Club