## **E&B Seminar Series**





## Improving the use of satellite-derived data in ecosystem risk assessments

**Date** 

27th Nov (Fri.)

**Time** 

16:00 (UTC+8)

Venue

3N01 & Zoom



You can also email us to require the Zoom link (check SBS website→NEWS & EVENTS)

In response to ongoing biodiversity decline globally, the IUCN Red List of Ecosystems (RLE) was recently developed as a framework to assess risk of ecosystem collapse, and has been applied to ecosystems in more than 100 countries. Satellite data has emerged as an essential tool in informing the RLE, though there are still many gaps that need to be filled to maximise the potential of using satellite data for ecosystem assessments. In this talk, I will share the methods I have developed throughout my PhD which improve the way we can analyse and interpret satellite data within the context of conservation, how we can better estimate changes in ecosystem extent and ecosystem degradation. I will discuss the implications of these new methods in informing conservation policy. Lastly, I will briefly present future research ideas I have as I join Dr. Jin Wu's lab.

All are welcome!



## **About speaker:**

Calvin Lee was a PhD student at Deakin University in Melbourne, Australia. His PhD focused on understanding the uncertainties and inconsistencies that exist in the IUCN Red List of Ecosystems and Red List of Species. Additionally, he developed new methods analysing satellite remote sensing data and how we can better incorporate them into ecosystem assessments. The aim of this research is to understand the implications of using different methods to assess species and ecosystem risk, and to expand the capacity of current risk assessments by taking advantage of the non-invasive, efficient, and low-cost nature of remotely sensed data.