



## Ikechukwu Kalu

BSc in Geoinformatics and Surveying (Honours)

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### Summary

With the use of contemporary machine learning routines, my research will provide novel methods to quantify groundwater variations on a local scale.

Earth observation datasets from active and passive remote sensing sensors will be implemented for a critical assessment of groundwater extraction impacts on the terrestrial ecosystem.

The actions of climate variability on groundwater hydrology will be fundamentally evaluated using deep learning and statistical methods.

Large scale groundwater trend estimates will be validated using in-situ observations from local catchments over Australia.

### Research Expertise

- Groundwater hydrology
- Machine learning routines
- GRACE and SAR analysis
- Climatic impacts on global freshwater resources
- Hydro-geodesy