

# Lachlan L. Ng

GEOSPATIAL ENGINEERING GRADUATE

Richmond, 3121, VIC, Australia

✉ nglachlan@gmail.com | [in lachlan-ng](#) | [@ lachlan-ng](#)

## Experience

### Australian Urban Research Infrastructure Network (AURIN)

Melbourne, AUS

DATA OFFICER

May 2019 - PRESENT

- Processing and management of spatial data using Python, SQL and Shell scripting.
- Data extraction, transformation, spatialisation and loading into AURIN's databases.
- Metadata preparation and maintenance to support data interpretation.
- Providing user support and writing of documentation and user guides for the AURIN Workbench.

### The University of Melbourne

Melbourne, AUS

ACADEMIC DEMONSTRATOR

Feb. 2019 - May 2019

- Provided teaching support in ENVS10006 Mapping Environments.
- Demonstrated basic spatial analysis processes in ArcGIS and fundamental surveying procedures to undergraduate students.

### FrontierSI

Melbourne, AUS

SBAS TEST-BED ASSOCIATE

Nov. 2018 - Feb. 2019

- Conducted positioning performance testing of the Space Based Augmentation System (SBAS) GNSS Test-bed signals with consumer and survey grade equipment in various environments.
- Designed test regimes, including site identification and resource management.
- Established control networks and performed data collection for static and kinematic GNSS tests.
- Post-processed GNSS observations and performed statistical positional performance analyses.

## Education

### The University of Melbourne

Melbourne, AUS

MASTER OF ENGINEERING (SPATIAL)

Feb. 2018 - Nov. 2019

- *Coursework:* Spatial Analysis, Spatial Data Infrastructure, Spatial Databases, Mathematics of Spatial Information, Satellite Positioning Systems, Engineering Management, Engineering Practice and Communication.
- *Research Project:* Positioning Performance Evaluation of Dual-frequency GNSS Observations from a Smartphone.

### The University of Melbourne

Melbourne, AUS

BACHELOR OF ENVIRONMENTS (SPATIAL SYSTEMS)

Feb. 2015 - Nov. 2017

- *Coursework:* Integrated Spatial Systems, Applications of GIS, Database Systems, Foundations of Computing, Engineering Computation.

## Honours & Awards

2019	<b>G.J. Thornton-Smith Memorial Prize</b> , Best graduating student in the final year of Master of Engineering (Spatial).	Melbourne, AUS
2019	<b>Ian Charles Taylor Prize</b> , Best performance in final year of Master of Engineering (Spatial).	Melbourne, AUS
2018	<b>H.B. Howard Smith Exhibition Prize</b> , Best result in GEOM90033 Satellite Positioning Systems.	Melbourne, AUS
2017	<b>Chris Lester Award</b> , Best result in GEOM30012 Integrated Spatial Systems.	Melbourne, AUS

## Skills

<b>Software</b>	ArcGIS, Excel, Jira, Jupyter, QGIS, RTKLIB, Visual Studio Code
<b>Programming</b>	Python, R, Shell, SQL, TeX
<b>Technology</b>	Git, PostgreSQL, GeoServer, CKAN, Linux GNU

## Extracurricular Activity

### International Global Navigation Satellite Systems (IGNSS) 2020

Sydney, AUS

MASTERS RESEARCH PROJECT PRESENTATION

Feb. 2020

- Co-presented Master's research on smartphone GNSS positioning highlighting project results and future research.