

# COMP39/9900 Computer Science/IT Capstone Project

## School of Computer Science and Engineering, UNSW

**Project Number:** P31

**Project Title:** A web based digital twin platform for sustainability analysis

**Project Clients:** Mohsen Kalantari

**Project Specializations:** Web application development.

**Number of groups:** 3

### **Background:**

This project aims to customize an open-source digital twin platform to spatially map the carbon footprints and greenhouse emissions of various industries in Australia.

### **Requirements and Scope:**

You will work on customising TerriaJS, an open-source framework for web-based geospatial catalogue explorers. <https://docs.terria.io/guide/>.

Deploy TerriaJS

Integrate greenhouse gas emissions data with land use data of Australia

Publish the integrated data via TerriaJS

Develop analytical and visualisation options

### **Required Knowledge and skills:**

TerriaJS can be extensively customized, often without writing any code. JSON configuration files control the catalogue and many aspects of the look and feel.

### **Expected outcomes/deliverables:**

A web-based mapping system deployed in a UNSW server.

### **Supervision:**

Mohsen Kalantari

### **Additional resources:**

TBC