ANEES OMAR

Cape Town, South Africa | aneesomar.ao@gmail.com | LinkedIn | +27 63 193 3864

BSc Final Year Student | Engineering, Geomatics & Computer Science | Lifelong Learner

BSc Candidate at UCT, Class of 2025

Majoring in Geomatics and Computer Science, I've developed strong technical skills, a diligent work ethic, and solid organisational abilities—applied across personal projects, internships, and part-time roles. I'm currently **seeking Graduate or Internship opportunities** in **Software Engineering, Geomatics or Finance.**

Technical skills: Python, Java, JavaScript.

Education

University of Cape Town - Bachelor of Science in Geomatics and Software Engineering.

- **Geomatics topics covered: Engineering Mathematics, Physics Photogrammetry, Surveying, GIS, Error theory, Remote sensing**
- **Computer Science topics covered: Java, Python, Parallel & Concurrent Programming, Theory of algorithms and computation, Networks and computer architecture, SQL**
- Class of 25'

Westerford High School - Matric

- Graduated in 2020

Personal Projects & E-Portfolio

Halal Bites: halalbites.co.za

Developed **halalbites.co.za**, a platform for discovering halal restaurants in Cape Town, leveraging Google Places API, OpenStreetMap, and Mapbox for geolocation and mapping features. Made using Next.js

E-Portfolio: https://e-portfolio-iota-jade.vercel.app/

University Project Experience -3rd Year

Project: Mapping of UCT residence (team size: 3)

This project focused on data acquisition, processing and delivering accurate outputs in a timely fashion ;

- Utilized ZF Laser Scanner, drone imagery, and photogrammetry to generate a detailed 3D model and a point cloud of UCT's residence building.
- Processed and integrated data using Agisoft Metashape, Trimble Business Center, and CloudCompare.
- Demonstrated skills in data acquisition, geospatial processing, and 3D visualization through accurate model reconstruction and point cloud analysis.

Tech stack: Agisoft Metashape, Trimble Business Center, CloudCompare

Statistical Plant Ecosystem Generator (team size: 3) - https://github.com/PlantGen141/PlantGen

This project had to run end-to-end in a preset timeframe - we focused on creating 3D rendered environments for the Entertainment industry.

- Developed a system to generate realistic plant ecosystems using statistical sampling techniques informed by environmental data and user-defined parameters.
- Implemented the back-end in Java to handle data processing and logic, and used Unity for real-time 3D rendering and visualization.
- Showcased strengths in algorithm design, environmental modelling, and cross-platform integration.

Tech stack: Java, Unity

Land evaluation website (team size: 2) - https://spatialdatainfrastructuresproject.vercel.app/

Designed and developed an interactive web application to support land evaluation by providing accessible spatial insights for informed decision-making.

- Built using HTML, Leaflet.js, and QGIS, with deployment handled via Vercel.
- Applied principles of Spatial Data Infrastructures (SDI) to integrate geospatial layers and enhance usability for non-technical users.
- Demonstrated strengths in web mapping, database management and geospatial data integration with a user-centric design.

Tech stack: JavaScript, QGIS, HTML, SQL

Work Experience - Part time/Internship

Company: Primitive Solutions & Dollhouse Boutique
Position: Web Developer (Part-time)
Duration: Mar 2022 – Mar 2024

- I built the e-commerce site from scratch to make online sales more efficient, easier to navigate and improved user experience
- Set up inventory systems, improved SEO, and established a Google Business profile.
- Migrated retail operations from Facebook Marketplace to Takealot

Company: Naushad Land Surveyor
Position: Internship
Duration: Dec 2021 & Jan–Feb 2024

- Worked on the preparation of land surveyor certificates and cadastral diagrams.
- Contributed to subdivision planning, topographical surveys, beacon relocations and engineering surveying tasks.
- Performed fieldwork calculations to ensure accuracy and reliability in survey documentation.
- Gained hands-on experience in cadastral and engineering survey workflows, including both office-based processing and on-site surveying.