

# Ngakana Salemane


Software Engineer | Data Analyst

Email  
nlsalemane@gmail.com


Phone  
(+27) 63 848 3025

Address  
Cape Town

## Education

 Angular – The Complete Guide  
Udemy  
Certificate Of Completion  
2022

 Electro-Mechanical Engineering\*  
UCT  
\*556 of 576 credits completed  
2017 – 2020

 Matric  
Le-Reng Secondary School  
100% Maths and Physical Science  
2012 – 2016

## Socials

 GitHub  
<https://www.github.com/ngakana>

## Interests

- User Experience
- System Architecture
- Civic Tech
- Logistics
- Retail
- Ed Tech
- Embedded Systems

## Work Experience




Geospatial Developer

Esri South Africa

2023 May – 2024 May

📍 Cape Town

- Helped with implementation of an **Angular** web app and an **ASP.NET Core RESTful API** for an emergency management system for one of South Africa's provinces. Implementation was done using test driven development approach. We tested some of the critical Angular components using **Playwright** and did unit testing for all the API endpoints. I also attended the solution architecture and database design sessions to gain familiarity with UML diagrams and building databases using **Microsoft SQL Server**.
- Helped build an Android (client spec) custom navigation mobile application using **.NET MAUI** for use by crew members of dispatched emergency vehicles. My responsibilities were implementing UI designs and some of the backend services.
- Configured CI/CD pipelines for Angular and .NET applications on **Azure DevOps**



Y.E.S Candidate


Esri South Africa


2022 May – 2023 April


📍 Cape Town

- For my second project, I designed and built an end-to-end solution using **Python**, **Angular**, **ASP.NET**, **jsreport** and **ArcGIS Maps SDK for JavaScript** to develop an application to help property managers of a large retail chain to evaluate locations for candidacy to place new stores. Features included ability to interact with a map and select locations, retrieve a custom analysis report from the backend and render it within the web app with an option to download it as a PDF file.
- For my first project, I developed a machine learning model for a big diamond mining company using LiDAR data and **Python** to monitor rockfall hazard of an open-cast mine
- Learned about S.O.L.I.D principles and how to implement them using Angular
- Completed an Angular v14 online course
- Learned OOP and how to implement its practices using Python
- Completed instructor-led **GIS** courses and a combination of online and instructor-led courses for **spatial data analysis** with Esri South Africa College.

## Skills


 Software Engineering


 Data Analysis


 Geographic Information Systems


## Tools and Technologies


Languages

 TypeScript


 C#


 Python


 SQL


 Embedded C

Frameworks and Libraries


 Angular


 .NET MAUI


 RxJS


 React


Markup and Styling Technologies

 HTML


 CSS


 SASS


 Bootstrap

 Tailwind


DevOps Technologies


 Git


 GitHub

 Azure DevOps

Database Management Services

 MS SQL Server

 MongoDB

 pgAdmin