

SUMMARY

Highly motivated and professional Junior Data Scientist with hands-on experience in Python, SQL, GitHub and AWS gained through structured internships and academic projects. Proficient in building data pipelines, developing predictive models, creating interactive dashboards to support data-driven decision-making, and experimenting with Generative AI to prototype intelligent solutions. Experienced in working within an Agile framework. Possess strong analytical, communication, and interpersonal skills with a proven ability to work independently and collaboratively.

EDUCATION

Stellenbosch University

Bachelor of Science in Geoinformatics and Socio-Informatics (2020-2022)

Bachelor of Science Honours in Geoinformatics (2023-2024)

Honours research: Developed and trained a Siamese Autoencoder Model in PyTorch and TensorFlow for urban change detection on bi-temporal satellite imagery.

SKILLS

- Programming Languages: Python (NumPy, Pandas, GeoPandas), R, SQL
- Machine Learning & Analytics: Scikit-learn, TensorFlow (basic proficiency).
- Data Visualization: Matplotlib, Plotly
- Cloud & Big Data: AWS (S3, Athena, Glue, Lambda)
- API Integration & Automation: OpenAI, Anthropic, ESRI, ORS, Google Places, TomTom
- DevOps & Collaboration: Git/GitHub (basic proficiency), Jira (Agile/Scrum)

CERTIFICATIONS/OTHER

- AWS Partner: Cloud Economics; Sales Accreditation; Technical – December 2024
- AWS Certified Cloud Practitioner – March 2025
- FinOps Certified Practitioner – March 2025
- Head Mentor for Dagbreek Manskoshuis in Stellenbosch.
- Interests: Running, Soccer, Gen AI

PROFESSIONAL EXPERIENCE

Junior Data Scientist Apprentice

Timbuk2 AI | December 2024 – April 2025

- Completed a 5-month Junior Data Scientist Apprenticeship, prototyping computer vision workflows (MetaSAM, Hugging Face) to extract spatial features and site insights.
- Assisted in testing prompts for GPT-4o, Claude 3, and Gemini to evaluate hallucinations and improve GenAI workflow reliability.
- Built a GPT-4o-powered chatbot integrating OpenRouteService to deliver dynamic geospatial insights at scale.
- Developed retail feasibility models using Google Places APIs and SQL to assess population density and competitor presence.
- Built AWS ETL pipelines (Glue, Lambda, Athena) to automate ingestion of CSV/Parquet data.
- Collaborated in an Agile environment with daily stand-ups and Jira ticket management to align on weekly deliverables.
- Reference: Mr Matimba J Nkuna (CEO, email: mjnkuna@timbuk2.ai)

Geospatial Intern

C4 EcoSolutions | February 2024 – September 2024

- Completed a six-month internship at C4 EcoSolutions as a geospatial intern, contributing to remote sensing and analysis tasks for agroforestry and UNDP projects.
- Led remote sensing efforts for multiple agroforestry projects, including scoping studies in the Sand River Catchment and for the Mpumalanga Tourism & Parks Agency.
- Contributed to literature reviews for international agroforestry projects such as in Saudi Arabia.
- Reference: Mr. Jaun Loggerenberg (Head Scientist, email: jaun.loggerenberg@c4es.co.za)

Research and Assessment Assistant

Stellenbosch University | February 2023 – November 2024

- Facilitated adoption of R for machine learning workflows: develop hands-on tutorials demonstrating data import, cleaning, model training (linear regression, decision trees) and evaluation (cross-validation, ROC Curve) using libraries such as caret.
- Instruct students on spatial data analysis in ArcGIS Pro and QGIS: implementing exercises covering geoprocessing tools, vector/raster workflows, symbology, and spatial analysis.
- Reference: Mr. Curtis Bailey (Lecturer, email: cbailey@sun.ac.za)