

# Chris Mahlake

## AI ENGINEER ASSOCIATE

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[GitHub Portfolio](#) | [LinkedIn Profile](#) | [Website Portfolio](#)

## Professional Summary

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Analytical and results-driven AI & Machine Learning Engineer with a strong background in Data Analytics, Security and cloud-based model deployment. Certified by Microsoft, IBM and Google in AI, Machine Learning and Data Analytics. Skilled in building predictive models, developing neural networks, and deploying AI solutions using Python, Azure and Streamlit to drive intelligent automation and data-driven decision-making.

## Skills

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### AI & Machine Learning

- Supervised, Unsupervised learning, Deep Learning
- Neural Networks, Regression Analysis, Generative AI & NLP
- Predictive Modeling, Model Evaluation, Probability & Statistics
- Feature Engineering, Statistical Inference & Methods

### Data Analytics & Visualization

- Data Cleaning & Visualization, EDA
- Matplotlib, Seaborn, Power BI, SAS
- Statistical Analysis & Hypothesis Testing

### Technical Tools & Languages

- Python (Pandas, NumPy, Scikit-learn)
- SQL (Queries, Joins, Aggregations), Jupyter Notebook
- Azure ML Studio, IBM Watson Studio, Streamlit

**Soft Skills:** Analytical & Critical Thinking, Communication, Teamwork, & Problem-Solving

# Certifications

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- **AI & Machine Learning:**
  - Microsoft Azure AI Engineer Associate
  - Microsoft Azure AI Fundamentals (AI-900)
  - IBM AI Engineering: **Professional Certificate**
  - IBM Machine Learning: **Professional Certificate**
  - IBM Data Science: **Professional Certificate**
  - IBM Applied Data Science: **Specialization**
  - Imperial College London Mathematics for Machine Learning: **Specialization**
- **Data Analytics:**
  - IBM Data Analyst: **Professional Certificate**
  - IBM Business Intelligence (BI) Analyst: **Professional Certificate**
  - Google Business Intelligence: **Professional Certificate**
  - Google Data Analytics: **Professional Certificate**
  - Google Advanced Data Analytics: **Professional Certificate**
  - SAS Statistical Business Analyst: **Professional Certificate**
  - SAS Visual Business Analytics: **Professional Certificate**
- **Cybersecurity:**
  - Google Cybersecurity, & IBM Cybersecurity Analyst: **Professional Certificates**
  - Macquarie University Cybersecurity - Data & Identity Security: **Specialization**

# Experience

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Netcampus Group | Intern

May 2025

- Applied Python and Azure ML to perform basic predictive analytics, integrating AI techniques, which enhanced efficiency by 15%.
- Engaged in AI-driven projects including conversational AI and computer vision (image classification and object detection) as complementary tools to support analytics insights.
- Collaborated with a small team on end-to-end data workflows, from data preparation and feature engineering to testing and deployment in the Azure cloud environment.
- Strengthened organizational efficiency by integrating AI-powered solutions that improved data accessibility, interpretation, and reporting accuracy by 30%.

# Projects

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## Disease Prediction AI – *Deployed with Streamlit* ([Live Demo](#))

- Built, trained and deployed a ML model to predict disease risk from health metrics.
- Delivered real-time predictions through streamlit and implemented data preprocessing, feature selection, and model training with scikit-learn.
- Serialized the trained model using Pickle and built an interactive web app (streamlit) allowing users to input parameters and receive instant results.
- **Tools:** Python, Pandas, Scikit-learn, Streamlit, Pickle

## AI Chatbot Assistant – *Streamlit + OpenRouter API* ([Live Demo](#))

- Designed and deployed a conversational AI chatbot integrated with multiple language models
- Implemented NLP and API communication for dynamic context-aware responses and demonstrated prompt handling and multi-model responses connected to LLMs
- **Tools:** Python, Streamlit, OpenRouterAPI

# Education

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## University of Mpumalanga

2019 - 2022

- Diploma in Information and Communication Technology (Application Development)

## Hlanganani High School

2013 - 2017

- National Senior Certificate (Matric)

# References

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- *Available Upon Request*