

# **CHIDO CHINOGUREI**

# Contact

#### Address:

7 Percy Rd, Ottery Cape Town, South Africa

#### Phone:

+27 (0)61 073 8142

#### Email:

cmgchinogurei@gmail.com

# Languages

**English -Fluent** 

# **Certifications**

Google Data Analytics Certificate.

#### **Education**

MPhil in Demography – 2017 Centre for Actuarial Research University of Cape Town, SA

BSc in Statistics – 2014

Department of Statistics and Actuarial Science

University of Zimbabwe, ZW

# Programming Languages

- R Intermediate
- T-SQL Advanced
- STATA Advanced
- Python Beginner

# **Summary**

Senior Data Scientist specializing in effective data pipelines for big data ingestion processes for public health information systems. Experienced with all stages of the data migration cycle for dynamic data projects. Well-versed in numerous programming languages including T-SQL and R. Strong background in data management and data analysis of demographic longitudinal data.

# **Skill Highlights**

- Data engineering
- Health analytics
- Complex problem solver

- Data analytics
- Data visualization
- Data warehousing

# **Experience**

Senior Data Scientist - 04/2021 to Current

**IeDEA Southern Africa**, Centre for Infectious Disease Epidemiology Research, **University of Cape Town**, South Africa

- Develop data pipeline solutions to enable automated approaches to aggregating data from several health facilities within South Africa to conform to the IeDEA data exchange standards.
- Designed and implemented advanced machine learning models to identify patients who
  falsely identify as ART naïve. This model has been able to identify 30% of patients in the
  local cohort falsely reporting their ART experience and has helped reduce bias in data
  driven evidence papers understanding ART initiation.
- Develop strategic dashboards to inform research partners and Principal Investigators on available data from South African clinics and sites.
- Collaborate with multiple teams in IeDEA consortium globally to achieve data harmonization.
- Led a cross-functional team of 2 data scientists, providing mentorship, guidance, and fostering a culture of innovation and collaboration within the team.
- Carry out quality assurance tests to discover errors and optimize usability of cohort datasets.

Data Scientist - 12/2018 to 04/2021

Agincourt Research, University of Witwatersrand, South Africa

- Develop operational dashboards for Census surveillance monitoring real-time data using R Shinv.
- Spearheaded the implementation of a data lakes and data warehouse architecture, improving data accessibility and facilitating data-driven decision-making across the organization.
- Developing ETL models to carry out new procedures that correspond with database structures to enable data sharing with collaborating institutions e.g SAPRIN and the ALPHA network.
- Developed and maintained a machine learning algorithms to detect repeat entries of the same individual into the surveillance site without allocating a new identifier in each entry. This was a hybrid model with both a deterministic and probabilistic approach, which helped to enrich longitudinal surveillance data and reduce double counting by
- Developing the Verbal Autopsy output results for monitoring mortality in the surveillance site.
- Develop algorithms to detect dirty data.
- Carry out quality assurance tests specifically tailored for longitudinal datasets to discover errors and optimize data usability.

Data Analyst - 08/2016 to 11/2018 NIDS SALDRU (UCT), South Africa

- Maintaining data quality assurance
- Identifying and resolving inconsistencies in data.
- Collaborating with survey assistants to resolve errors identified in the data.
- Validate archived information with physical paper forms.

# Project Management Tools

- Git and GitHub
- Slack
- Trello

# Research Assistant - 02/2016 to 01/2017 Centre for Actuarial Research (UCT), South Africa

- Assist in in updating the CARe model, a population projection model for South Africa.
- Use other models in providing inputs for calibrating the CARe model.
- Document the process of updating the model.

# References

# Visseho Adjiwanou, University of Montreal, Professor

Email: adjiwanou.visseho@uqam.ca Tel: (514) 987 3000 ext 0900

"I worked with Prof Adjiwanou during my time at the Centre for Actuarial Research. I assisted him on a project of the research on applications big data and machine learning in sub-Saharan Africa"

#### Evidence Matangi, Purdue University, Assistant Professor

Email: ematangi@purdue.edu Tel: 765-494-3504

"Evidence was my lecturer in my Honours program and is also my mentor and advisor"

#### Itayi Adams, University of Witswatersrand, Systems and I.T Officer

Email: <a href="mailto:ltayi.Adams@wits.ac.za">ltayi.Adams@wits.ac.za</a> Cell: (+27) 071 181 6633

"Itayi helped us with setting up I.T infrastructure during my time at Agincourt Research"