


# RICKY SAMBO MACHARM


## DATA SCIENTIST

### CONTACT


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<https://github.com/theAfricanQuant> 

### EDUCATION

Master of Science in Financial  
Engineering  
World Quant University  
2021

Certificate in Python for Algo  
Trading  
Saarland University of Applied  
Sciences  
Germany  
2022

Bachelor of Engineering  
(B.Eng.) in Electrical &  
Electronics Engineering  
Abubakar Tafawa Balewa  
University  
Bauchi, Nigeria  
2000

### SKILLS

MongoDB  
MySQL  
Dash  
XGBoost  
Scikit Learn  
FastAI

### WORK EXPERIENCE

#### Data Science Teaching Assistant (Remote)

WorldQuant University

2022 - current

- Worked with scores of students to understand the basics of Python, Pandas and Data Science
- Helped students to fully work with scikit learn, MySQL, MongoDB, Bash Commands, building web apps and performing A/B testing
- Watch out for bugs in the codes and the terminals

#### Freelance Consultant

SisengAI

2021 - current

- Consultant with GIZ project Energy Solutions for Displacement Settings (ESDS), Ethiopia developing end-user financing for refugee and host communities in Gambella region
- Diagnosis and maintenance of lab equipment for the African Union (AU)- PANVAC, Debre Zeit Ethiopia
- Building backtesting apps for deployment
- Running a Python and Data Science coaching program

#### Data Scientist/Energy Manager

Siseng Consulting LTD

2017 - 2020

- Experience with analysis of UAV images using Artificial Intelligence algorithms to investigate the impact of Electrical, Solar and other man-made installations on the environment and also to create reports on predictive maintenance of infrastructures on different sites. AI inspection can annotate faults in images quickly and with high accuracy
- Experience with working with clean energy projects funded by international Agencies (German International Cooperation etc)
- Experience in the design and installation of electrical systems and solar systems required along with familiarity of electrical codes and standards
- Strong computer skills on regular office applications with well-developed data analysis skills using Python and excel
- I was able to accomplish Load Profile data collection for a 710kW site as a subcontractor for Likusasa Holdings Limited in preparation for mini grid project in 2019
- I have experience with site orientation and advisory services on solar design and component selection, Installation, and maintenance

**coaching in:**  
Python  
Data Science  
Artificial Intelligence  
Python for Algorithmic Trading

- I conducted and completed a feasibility and market study, in conjunction with undergraduate students of University of Applied Sciences in Austria, on Garki Market, Abuja, Nigeria, with an area of over 123 square meters
- It gives an overview of the market status and potential
- Load Profile analysis of buildings based on the kWh energy consumption and equipment use found in each shop
- Supported the design, planning and Installation of over 60 Solar-thermal heaters in a secondary school
- As a consultant with Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH overseeing solar installations in Adamawa and Borno States in the North East of Nigeria

## Principal Electrical Engineer

National Veterinary Research Institute, Vom

2007 - 2018

- I headed a team of 4 engineers to run the maintenance schedule for various labs
- I planned and carried out walk-Through energy audits of offices and recommendations written to management for improvement
- I successfully led the team responsible for the daily maintenance of the Bio-Safety Level 3 (BSL 3) Laboratory
- I worked with the South African team of engineers that designed and constructed the Bio-Safety Level 3 (BSL 3) laboratory
- Over a period of ten years, I carried out regular Maintenance of Laboratory equipment (Hot air Ovens, freeze dryers, cold rooms, bio-safety cabinets, incubators, Liquid Nitrogen Plant, autoclaves, air compressors, Heating Boilers, bore-Hole water pumps and panels etc
- Designing Standard operating procedures (SOP) for fault reporting in laboratories
- Installing and maintenance of a three-phase inverter system and battery bank (480v, 1.6kWH) for air-handling unit of a laboratory

## Electrical Engineer I

Jos Metropolitan Development Board, Plateau State

2006 - 2007

- Head of the Electrical Engineering department
- Oversaw the day-to-day operations of the Electrical Department while reporting to management
- Supporting the development of strategic operational plans while assigning and supervising activities of Junior electrical technicians

## Campus Coordinator

Great Commission Movement of Nigeria, Maiduguri

2001 - 2005

- Co-facilitated the establishment of a network of students' development practitioners across university campuses in the North-Eastern States of Adamawa, Bauchi, Borno and Yobe States
- Conceptualized various pilot development projects with the identified students in Mubi, Yola, Yobe and Maiduguri campuses

- Coordinated the implementation of the initiated projects across the four campuses and designed the monitoring and evaluation framework for the projects
- Ensured quarterly reporting of progress and dissemination to the project stakeholders, including the funders
- Organized joint reflection and learning events for participating students across the four campuses
- Ensured knowledge management and dissemination of best practices
- Served as a resource person for building the capacities of students during annual national and international retreats
- Represented the regional project coordinator in acting capacity, in his absence
- Jointly planned regional and international workshops, seminars and conferences across Nigerian and Accra, Ghana