

Personal Details

SURNAME: **BARASA**

FORENAMES: **Gilbert Wafula Musamali**

ADDRESS: P.O. Box 41762-00100, Nairobi, KENYA

MOBILE: +254703726595

EMAIL: gilbert.barasa@gmail.com

NATIONALITY: Kenyan

Summary

R&D team leader with 5 years' experience in research, design and development of water and energy solutions with particular focus on **digital innovations** and **control and instrumentation**, and 2 years' experience in customer-facing roles encompassing technical sales and cross-functional teams' coordination.

Specific areas of expertise include control, instrumentation and **industrial automation** (PLC, SCADA and BMS), water treatment and pumping, renewable energy solutions, energy management systems, water management systems, and digital systems innovations (M2M and IoT).

Assistant manager in Engineering Division with 7 direct reports and over 50 indirect reports, and indirect control of a production budget of over **USD 6M**.

Professional Experience

Davis & Shirliff Limited (November 2018 to date)

Function: Research and Development Manager

Davis & Shirliff Group <https://www.davisandshirliff.com/> is the leading supplier of water and energy solutions in East and Central Africa based in Nairobi, Kenya with subsidiaries in six countries in the East Africa region.

Main responsibilities and accountabilities

- Identify, research and develop new innovations, differentiations, modifications, and adaptations in water and energy segments - water treatment, generators, solar, irrigation, swimming pools and water pumps.
- Delivery of digital systems innovation projects.
- Technical advisor at the company's product committee.

Davis & Shirliff Limited (November 2014 to October 2018)

Function: Assistant Manager, Engineering - Control & Instrumentation

Main responsibilities and accountabilities

- Developing and managing the control and instrumentation engineering business supporting Davis & Shirliff Group, business process management, P&L management and standardization across the Group.
- In conjunction with commercial departments, designing and specifying customized control systems to address specific customer requirements.
- Developing and implementing training programmes for Davis & Shirliff engineers and technicians on specifying and supporting electrical/electronics products.

Key achievements

- Development of a new technical function in the engineering division accounting for generation of 15% in direct revenues within 3 years and delivering new capabilities to the Group.
- Development of iDAYLIFF, an internet-based M2M/IoT system for remote monitoring and control of equipment <http://i.dayliff.com/getstarted/>.
- Establishment of a new workshop with Kenya Bureau of Standards certification and digitalized systems.
- Electrical lead in 15 key projects worth USD 2M.
- Transfer of all outsourced electrical systems development to internal staff. In-house development of advanced control solutions established a sustainable competitive advantage in the market.

Major Projects completed:

- Automation of battery cooling system at the formation tub of Associated Battery Manufacturers Ltd that improved production capacity by about 40%; project cost - USD110,000.
- Supply and installation of **UDV (Kenya) Ltd** 15m³/hr Reverse Osmosis plant designed to meet **DIAGEO Engineering Standards**; supervised by main contractor **NIRAS Ltd (UK)** , project cost - USD110,000.
- Ngoma Irrigation Project (Rwanda) comprising 45kW installed PV with 5 pumps delivering 5000m³/day supervised by Takaoka Engineering Co. Ltd (Japan); project cost - USD190,000.
- Garden City Mall water play park automation; project cost - USD250,000.
- Two Rivers Mall Riverfront water filtration system and waterfall automation, supervised by Maiteri & Associates Consulting Engineers; project cost - USD350,000.

Davis & Shirliff Limited (November 2011- September 2013)

Function: Sales Engineer

Main responsibilities and accountabilities

- Consult with clients regarding their needs and determine products and services that could best meet those needs; including assisting client with specification and advice on use of the products.
- Conduct site surveys to determine scope of projects including analyzing and estimating resources required. Provide technical descriptions and content for proposals, tenders and contracts
- Provide operational and technical support during supply, installation and product lifecycle. Liaise with other teams to resolve any arising challenges.

Education, Training and Certifications

Graduate Diploma in Digital Innovation (Ongoing)

University of London - Distance Learning

Master of Science in Control Systems Engineering (2013-2014), Distinction

The University of Sheffield - Sheffield, United Kingdom

Kenya Postgraduate Merit Scholarship & Bechtel Prize 2013/2014

Bachelor of Science in Electrical and Electronic Engineering (2006-2010), First Class Honours

Jomo Kenyatta University of Agriculture and Technology-Nairobi, Kenya

T3 Grid Tie and Hybrid Course (2016)

Strathmore Energy Research Centre

Postgraduate Engineer's Water and Energy Training (2011-2013)

Davis & Shirliff Limited

Professional Memberships

MInstMC

Institute of Measurement and Control (UK)

Certified Energy Manager

Association of Energy Engineers

Professional Engineering Technologist

Kenya Engineering Technology Board

MIEEE

Institute of Electrical and Electronics Engineers

Graduate Engineer

Engineers Board of Kenya

Referees

To be provided upon request.