# Carol Ofafa

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#### **Academic Background**

# **University of Glasgow**

Glasgow, United Kingdom

Master of Science, Electronic and Electrical Engineering and Management

Sept.2017 - Nov.2018

#### **University of Nairobi**

Bachelor of Science, Electrical and Electronic Engineering

Nairobi, Kenya Sept.2008 - Aug.2013

#### **Professional Experience**

## E-Safiri (Greentech e-mobility start-up)

Nairobi, Kenya

Nov. 2020 - Present

**Role:** Co-Founder

Developed a team to carry out design, operations and installations works for off-grid solar PV

- charging systems for electric 2 and 3 wheelers.
- Responsible for design review of cloud-based asset management software for battery swapping.
- Developed optimization of PV systems using HOMER Pro.
- Explored and created partnerships with OEM partners in Asia and stakeholders in renewable energy and electric mobility in Kenya.
- Leveraging on the training on Solar PV at the Micro -Grid Academy hosted by RES4Africa and ENEL foundation, designed solar powered charging hubs for electric 2 and 3 wheelers.

### **Kenya Electricity Transmission Company (KETRACO)**

Nairobi, Kenya

#### Role: Project Supervisor, Operations

Mar.2020 - Present

- Undertook research and analytical work as part of the technical team in procurement of transaction advisory for the KETRACO's transition to public-private partnerships (PPP) projects delivery agenda.
- Member of the PPP Project Appraisal Team.
- Supervised 14 graduate engineers, technicians and craftsmen in the operations of the Ethiopia Kenya HVDC Converter station at Suswa, Kenya.
- Responsible for shift management and the participation of the employees under my supervision in the inspection, testing and commissioning of Suswa substation.
- Reviewed test procedures according to the approved commissioning manual. Provided and presented analysis and evaluation of power system data for Suswa region.
- Created operations manual for employees under my supervision on how to investigate system faults, disturbances, failures and correction.

#### Role: Graduate Electrical Engineer

Oct.2014 - Feb.2020

- Technical designer and a project implementation team (PIT)member with the responsibility for electrical design review and construction supervision of high voltage substations and transmission lines for Sondu-Homabay-Awendo and Kindaruma-Mwingi- Garissa projects.
- Deputy project manager and lead construction supervisor of transmission line project from Suswa to Isinya.
- Reviewed contractor schedule of works to ensure timely project completion.
- Responsible for factory and site acceptance tests for substation equipment.
- Supervision and witnessing of commissioning and pre-commissioning work at substations.
- Performed evaluation and due-diligence exercises for organizations that were proposed to be contracted for project implementation.

**Professional Accomplishments**: Head of State Commendation (HSC) ,2019-2020 (Highest civilian award in Kenya) for my work in project delivery for Suswa-Isinya project, my role in mentorship and contribution to increasing electricity access through Engineers without borders UK.

KPMG Kenya Nairobi, Kenya

Role: Associate

Sept. 2013 - Sep.2014

- Part of the team that carried out financial services & consumer industrial markets audits for different clients in Kenya.
- Prepared and presented financial statements for clients as part of the Audit report. I handled cash and bank audit, receivables payables audit as well as property, plant and equipment audit.

**Professional Accomplishment:** Provided strategy Support in the CEO's office where I researched and presented a system design for debt collection analysis that automatically recognized the most improved managers in collection. Resulting in an increase in debt collection by 20% in the 2nd quarter in 2014.

### **Engineering Research and Publications**

- Co-authored a paper on the use of risk management strategies to curb vandalism of transmission towers for the annual KETRACO research day, 2020.
- Design of off-grid solar charging station for 2 and 3-wheeler electric vehicles for Malindi, Kenya, 2019. I undertook the research under the Open Africa Power Fellowship Capstone Project.
- Design of a wind turbine farm to supply all the electrical needs of the island of Great Cumbrae, in North Ayrshire, Scotland. University of Glasgow, 2018.
- Lead designer for the Interactive inter-disciplinary collaborative system for researchers at the University of Glasgow for the Co-Lab (Collaborative Design challenge), 2018.
- An investigation on risk management strategies employed by transmission utilities in construction of electricity transmission infrastructure, 2018. I undertook the research during pursuit of my master's degree.
- Design of solar photovoltaic network for Kauma village, Kenya ,2013. I undertook the research in pursuit of a Bachelor's degree.

#### <u>Languages</u>

- **Luo**: Native speaker
- **Swahili, English**: Fully Proficient, speaking, reading and writing skills
- **French, German**: Beginner, speaking, reading and writing skills

#### Awards

- Semi-Finalist at the Standard Chartered Women in Tech incubation, 2021.
- Winner, Better Cities Challenge, 2020.
- Open Africa Power Fellowship, 2019.
- Regulation for Universal access to energy Master Level. Awarded by Florence School of regulation, 2019.
- Women in Energy Award Nominee (Kenya), Power Gaga Category, 2018.
- University of Glasgow Graduate Leadership Award, 2018.
- Commonwealth Scholarship Award, to undertake M.Sc. at University of Glasgow, 2017-2018.
- Kenya Government, Joint Admissions' Board (JAB) scholarship award to undertake B.Sc. at University of Nairobi, 2013.
- United World Colleges Award, 2007.

#### **Volunteer work and Leadership**

- Mentoring female engineering students at University of Nairobi under GN3 Fanusi Mentorship Program, 2020-Present.
- Mentored first year Environmental Engineering students at University of Glasgow in design of Thermoelectric Generator to increase electricity access in Kibera, Kenya and later went on to win the Engineers Without Borders design challenge, 2017-2018.
- Volunteer and event organizer for the International Universities Power Engineering Conference (UPEC) at the Glasgow Caledonian University, 2018.
- Convener of the group mentorship sessions for Girls at Precious Blood academy Riruta under Akili Dada mentorship program, 2016.