



SIMON KABOYO

Mobile:+1 416-732-9669

Email:kaboyos@mcmaster.ca.

Linkedin:[linkedin.com/in/simon-kaboyo](https://www.linkedin.com/in/simon-kaboyo).

Nationality:Ugandan

SUMMARY

Researcher in wireless communication systems, applying machine learning (ML) to optimize network performance. With a strong background as an RF optimization engineer working across multiple countries, I combine industry experience with advanced research to address complex communication challenges.

EDUCATION

Doctor of Philosophy <i>Electrical and Computer Engineering.</i> McMaster University.	Jan. 2025 – Present Hamilton ON, Canada
Master of Science <i>Electronics and Communication Engineering.</i> Egypt Japan University of Science and Technology.	Mar. 2022 – Aug. 2024 Alexandria, Egypt
Bachelor of Science <i>Telecommunications Engineering</i> Makerere University.	Sep. 2011 – Dec. 2015 Kampala, Uganda

RESEARCH PROJECTS AND EXPERIENCE

Age of information analysis in underwater optical systems <i>Reinforcement Learning</i> Communications Research Lab:- McMaster University.	Winter 2025
Optimizing age of information in OMA/NOMA systems <i>Reinforcement Learning</i> Wireless Comm. and IoT Lab:- Egypt Japan University of Science and Technology.	Spring 2024
Age of Information analysis for OMA/cooperative NOMA full duplex system Wireless Comm. and IoT Lab:- Egypt Japan University of Science and Technology.	Fall 2023
High-Performance Road Surface Anomaly Detection <i>Deep Learning</i> Computer Vision Lab:- Egypt Japan University of Science and Technology.	Spring 2023

CONFERENCES AND PRESENTATIONS

Age of Information Analysis for Full duplex cooperative SWIPT NOMA IEEE Wireless Communications and Networking Conference (WCNC 2024).	April 2024
Optimization of Age of Information in Adaptive FD/HD Cooperative NOMA/OMA System (Under Review IEEE TCGN Journal).	
Age of Information Analysis for FD Cooperative SWIPT System: NOMA versus RSMA (Accepted) IEEE International Conference on Communications (ICC 2025).	Jan 2025

WORK EXPERIENCE

Radio Frequency Engineer Emerald Telecom (U) Ltd:- Airtel Uganda Projects	August. 2024 –Dec. 2024 Kampala, Uganda
- RF performance evaluation along with Huawei and Airtel Project Engineers. - RF optimization of new sites and KPI monitoring on LTE and UMTS technologies. - Coordinated and scheduled drive test teams for project delivery.	
Radio Frequency (RF) Engineers Team Lead Emerald Telecom Botswana:- Orange Botswana Projects	Jan. 2020 – Jul. 2024 Gaborone, Botswana
RF performance evaluation along with Huawei and Orange Botswana project engineers.	

- RF optimization of new sites and KPI monitoring on LTE and UMTS technologies.
- Coordinated and scheduled drive test teams for project delivery.

Radio Frequency Engineer

Emerald Telecom (U) Ltd:- MTN Uganda Projects

- RF KPI monitoring and RF optimization.
- RF drive test, Logfile analysis, and report preparation.

Jan. 2019 – Dec. 2019
Kampala, Uganda

Drive Test Engineer

Emerald Telecom Zambia:- Liquid Telecom Projects

- RF drive test, log file analysis, and physical optimization.

June 2018 – Dec. 2018
Lusaka, Zambia

Site Engineer

Huawei Technologies (U) Ltd:- MTN Uganda RAN Modernization Projects

- Site supervision of subcontractor teams.
- 2G, 3G, 4G hardware installation, commissioning, and maintenance.
- Supervision of hardware installation(GSM, UMTS, LTE).

Jan. 2016 – Dec. 2016
Kampala, Uganda.

HONORS AND AWARDS

TICAD 7 Scholarship - Egypt Japan University of Science and Technology

Merit-based scholarship to support international study experiences.

Jan. 2022

Employee of the year - Emerald Telecom

Certificate of recognition.

Dec. 2021

SKILLS AND SOFTWARES

Reinforcement and Deep Learning: Python, TensorFlow, MATLAB.

Radio frequency Optimization: Huawei (U2020, Gnex assistant/probe), TEMS Investigation/Discovery, Actix, MapInfo, UNET.

Communication simulation: MATLAB/Simulink, NetSim.