



THE TECHNICAL UNIVERSITY OF KENYA

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Consultation Hours:	8AM-5PM MON - FRI



EDUCATION

LEVEL	QUALIFICATION NAME	INSTITUTION	YEAR
Doctor of Philosophy (PhD)	ELECTRONIC ENGINEERING	UNIVERSITY OF KWAZULU-NATAL(South Africa)	2019
Masters of Science (M.Sc.)	Electronic Engineering (Telecommunications)	University of KwaZulu-Natal(South Africa)	2016
Bachelor of Science (BSc)	Computing and Information Systems	University of London(United Kingdom)	2014
Bachelor of Science (BSc)	BPHIL IN TECHNOLOGY(ELECTRICAL &ELECTRONIC ENGINEERING)	University of Nairobi(Kenya)	2012
Higher Diploma	DIPLOMA IN ELECTRICAL &ELECTRONIC ENG.	KENYA POLYTECHNIC(Kenya)	2004
Diploma	TECHNICAL EDUCATION	KENYA TECHNICAL TEACHERS COLLEGE(Kenya)	2006
Diploma	DIPLOMA IN ELECTRICAL &ELECTRONIC ENG.	KENYA INSTITUTE OF MASS COMMUNICATION(Kenya)	1993
Certificate	INFORMATION TECHNOLOGY	KENYA POLYTECHNIC(Kenya)	1998
O level/Equivalent	KENYA CERTIFICATE OF SECONDARY EDUCATION	NASOKOL GIRLS SEC SCHOOL(Kenya)	1989

WORK EXPERIENCE

PERIOD	INSTITUTION	POSITION
24/7/2014 - TO DATE	kenya polytechnic	TECHNOLOGIST
01/03/1995 - 01/07/2009	kenya polytechnic	SNR TECHNICIAN

GENERAL STATEMENT ON RESEARCH AREAS

I am currently focused on dynamic rain fade mitigation techniques over earth-satellite communication links in addition to Wireless Communication, Machine learning and automation

SELECTED PUBLICATIONS

TITLE	LINK TO PULICATION
Rainfall Rate Prediction based on Artificial Neural Networks For Rain Fade Mitigation over Earth Satellite link	http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=8095546
30-Second and One-Minute Rainfall Rate Modelling and Conversion for Millimetric Wave Propagation in South Africa	https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8532248
Outage Prediction during Intense Rainstorm Events Using Queuing Theory and Markov Chains over Radio Links	http://www.jpier.org/PIERM/pierm73/19.18060205.pdf
Specific Rain Attenuation Dependence on Rain Storm Magnitudes and Measured Drop Sizes	https://ieeexplore.ieee.org/document/8572381
Effects of Storm Attenuation Over Satellite Links in Sub-Tropical Africa	https://ieeexplore.ieee.org/document/8597964
Rain Attenuation Prediction Using Artificial Neural Network for Dynamic Rain Fade Mitigation	https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8643146
Rain Attenuation Prediction Using Artificial Neural Network for Dynamic Rain Fade Mitigation	https://ieeexplore.ieee.org/document/8643146
Fade Slope Prediction Model for rain storms over Sub-tropical Africa	https://ieeexplore.ieee.org/document/9133736

COURSES TAUGHT

NAME	DESCRIPTION	PERIOD
Robotics & Cybernetics	Geared towards design and implementation of automated control systems	January 2016 - April 2016
Satellite and Mobile Communications	Wireless communication technologies and standards	Sept 2019 - TO-DATE
Digital Filter Design	Digital signals and systems with focus on the the design of digital filters	Sept 2019 - TO-DATE
Microprocessor Systems	Microprocessors and their interfaces to memory and I/O devices	Sept 2019 - TO-DATE
Telecommunication and the Internet	Wireless communication and the internet	Jan 2020 - TO-DATE
Automated Process Control Systems	Includes controllers, online measurement systems, SCADA systems and Robotics	Jan 2020 - TO-DATE
Microprocessor Architecture and Interfacing	Programming, hardware design, Memory and IO interfacing, Interrupts	Jan 2020 - TO-DATE
Comptuter Programming	C++ Programming	Jan 2020 - TO-DATE

PROFESSIONAL AFFILIATIONS AND SOCIETIES

TITLE INSTITUTION

Member	IEEE-HKN, UKZN Chapter
Member	IEEE
Member	IEEE Women in Engineering
Member	South African Institute of Electrical Engineers