

An Improved Call Quality for Call Drop Minimization during Handover in Mobile
Communication

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Certification

This is to certify that Temilola Adedamola John-Dewole with matriculation number LCU/PG/002141 carried out this research work titled “An Improved Call Quality for Call Drop Minimization during Handover in Mobile Communication” in the Department of Computer Science, Faculty of Natural & Applied Sciences, Lead City University, Ibadan, Oyo state, for the award of Doctor of Philosophy Degree (PhD) and that this has not been previously submitted.

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Dedication

This thesis work is dedicated to Almighty God.

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Even though the above-mentioned institutions and persons have assisted in the process of this research work, I alone stand responsible for the errors, if any, found in the work.

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List of Acronyms

MOSEL	Modelling, Specification and Evaluation Language
QoS	Quality of Service
MS	Mobile Station
LSTM	Long Short-Term Memory
CNN	Convolutional Network
BS	Base Station
TRAI	Telecom Regulatory Authority of India
AB	Anchor Base
EMF	Electromotive Force
GSM	Global System for Mobile Communication
UE	User Equipment
D2D	Device to Device
RSS	Received Signal Strengths
BSC	Base Station Controller
MSC	Mobile Switching Center
NCC	Nigerian Communications Commission
NMS	Network Management System

SNR	Signal-to-Noise Ratio
PL	Path Loss
KPI	Key Performance Indicators
GPRS	General Packet Radio Service
RL	Reinforcement Learning
ANN	Artificial Neural Network
TOPSIS	Technique for Order Preference by Similarity to Ideal Solution
MTSO	Mobile Telephone Switching Office
PSTN	Public Switched Telephone Network
ENB	Evolved Node B
DM	Direct Message
MSS	Maximum Segment Size

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