BIOGRAPHICAL SKETCH

NAME: Nyete, Abraham

eRA COMMONS USER NAME (credential, e.g., agency login): N/A

POSITION TITLE: Senior Lecturer, Department of Electrical and information Engineering, Faculty of Engineering, University of Nairobi

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
University of KwaZulu-Natal, South Africa	Ph.D	2016	Electronic Engineering
University of KwaZulu-Natal, South Africa	M.Sc.	2013	Electronic Engineering
University of Nairobi, Kenya	B.Sc.	2007	Electrical and Electronic Engineering

A. Professional Appointments and Accomplishments

Positions and Employment

2018–	Chairman and Convenor, School Postgraduate studies committee, Faculty of Engineering, University of Nairobi
2018–	Departmental Postgraduate Studies Coordinator, Department of Electrical and Information Engineering, University of Nairobi
2016–	Team Leader: Curriculum review for the BSc. In Electrical and Electronic Engineering, University of Nairobi; Organised a very successful stakeholders' workshop on 22/6/2017. Curriculum approved in 2022 by Senate.
2011	Secretary at the curriculum framework development retreat for department of Electrical and Electronic Engineering, University of Nairobi, 29/05/11 – 02/06/11, Nakuru

Other Experience and Professional Memberships

2023	Reviewer: IEEE Africon Conference (last one in 2023)
2017	Reviewer: ICT4DA 2017 Conference
2015	Technical program committee member-2015 IEEE AFRICON Conference
2014	Session Chair: 2014 IASTED Conference: Modelling and Simulation
–	Reviewer: IEEE Transactions on Mobile Computing
–	Reviewer: Journal of Atmospheric and Solar-Terrestrial Physics-Elsevier
–	Graduate member: Engineers Board of Kenya (Reg. no.: B9159)

Honors

2023	(Principal Investigator) Project title: Development of a Decision Support System for the California Bearing Ratio (CBR) Test Using Machine Learning, Funded by KENET (Grant No. KENET/ENG/2023/3)-Ongoing.
2019–2023	Electrical and Electronic expert: Project Title: Tracer Study Report on Destination of Engineering Graduates from Public and Private Universities in Kenya, Client-MoE-SDUER, Kenya.
–	Academic leader and adjunct faculty: Bachelor of Science in Telecommunications and Information Technology program, Machakos University, Kenya.

| 2020–2022 | Awarded as the Best Performing Lecturer in the Department of Electrical and Information Engineering and the Faculty of Engineering, attaining an Exemplary Performance in the 2020/2021 and the 2021/2022 Performance Contracting. |
| 2014–2016 | Awarded a DAAD Scholarship and ESKOM HVDC Centre Scholarship for my PHD Studies in UKZN. |

B. Teaching and Research Interests

I teach courses in telecommunications and computer networking, digital electronics, and analog electronics. My research interests are in power line communication (channel and noise modelling), radio wave propagation and modelling, and the application of artificial intelligence and machine learning to cross-cutting problems in engineering and technology, and health.

C. Selected Publications

1. Davies Segera, Mwangi Mbuthia, **Abraham Nyete**, Chapter 13 - Metaheuristics for optimal feature selection in high-dimensional datasets, Comprehensive Metaheuristics, Academic Press, 2023, Pages 237-267, ISBN 9780323917810, https://doi.org/10.1016/B978-0-323-91781-0.00013-2-Book Chapter.

2. Davies Segera, Mwangi Mbuthia, **Abraham Nyete**. Particle Swarm Optimized Hybrid Kernel-Based Multi-class Support Vector Machine for Microarray Cancer Data Analysis. In: Prime Archives in Medicine. Vide Leaf. 2020, 12 pages-Book Chapter.

3. Davies Segera, Mwangi Mbuthia, **Abraham Nyete**, An Innovative Excited-ACS-IDGWO Algorithm for Optimal Biomedical Data Feature Selection, BioMed Research International journal, vol. 2020, Article ID 8506365, 17 pages, 2020. https://doi.org/10.1155/2020/8506365.

4. Davies Segera, Mwangi Mbuthia, **Abraham Nyete**, Particle Swarm Optimized Hybrid Kernel-Based Multi-class Support Vector Machine for Microarray Cancer Data Analysis, BioMed Research International Journal, vol. 2019, Article ID 4085725, 11 pages, 2019. https://doi.org/10.1155/2019/4085725.

5. Addah Kyarisiima, **Abraham Nyete**, and Vitalice K. Oduol, Throughput optimization in DSRC for collision avoidance, International Journal of Scientific & Engineering Research Volume 10, Issue 4, April-2019, ISSN 2229-5518, pp. 1133-1140.

Complete List of Published Work on Google Scholar: Abraham Nyete

D. Ph.D and Postdoctoral Students Supervised

1. **Davies Rene Segera**, AN excited cuckoo search-grey wolf adaptive kernel SVM for effective pattern recognition in DNA microarray cancer chips, PhD, Graduated 2021 (thesis), Faculty of Engineering, Univeristy of Nairobi.

2. **Paul Sebastian Okoth**, Structural health monitoring for bridges: embedded sensor – based deformation detection using FEM and artificial intelligence, PhD, thesis (research on-going), Faculty of Engineering, University of Nairobi.

3. **Nyaory George Musumba**, Formulation of a Predictive Resource Allocation Criteria in 5G Heterogeneous Networks Slices in a Multi-access Edge Computing (MEC) System Architecture, PhD, thesis, (research on-going), Faculty of Engineering, University of Nairobi.

4. **Addah Kyarisiima**, Modeling and characterization of powerline noise in indoor PLC applications, PhD, thesis, (research on-going), Faculty of Engineering, University of Nairobi.

5. **Wycliffe Odongo Amolo**, Reactive Power Compensation Model for 1.0 pu Voltage Profile in City Business and Residential Areas with Penetration of Large-Scale Wind Farms, PhD, thesis, (research on-going), Faculty of Engineering, University of Nairobi.