OLUYEMI ADEWOLE OKUNLOLA
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Personal Details

Date of Birth:	April 3, 1978
Marital Status:	Married
Next of Kin	Mrs. Elizabeth A. Okunlola
Details of Contact Address of Next of Kin	Moniya, Ibadan (+23480508885)
State of Origin:	Oyo State
Senatorial District	Oyo South
Local Government Area:	Ibarapa East
Nationality	Nigerian
Date of assumption of Duty	March 1, 2016
Rank of First Appointment	Senior Academic Planning Officer
Present Status	Lecturer I
Date of Last Promotion	October 1, 2019
Present Salary, Grade Level and Step	CONUASS 4 STEP 1
Date of Confirmation of Appointment	October 1, 2019
Faculty/Directorate	Science
Current Department/Unit	Mathematical and Computer Sciences
Associate Department/Unit	Epidemiology and Biostatistics

Educational Background with Dates

- 2010-2013: University of Ibadan, Ibadan
  Master of Science (Statistics)
- 2007 - 2010: University of Ibadan, Ibadan
  Bachelor of Science (Statistics)
- 2003 - 2005: The Polytechnic, Ibadan, Ibadan
  National Diploma (Statistics)
- 2003 -2004: Posit College, Ojoo, Ibadan, Oyo State
  Senior Secondary School Certificate
- 1988 - 1993**:** Methodist Primary School, Eruwa , Oyo State
  Primary School Leaving Certificate

Award

Best-overall (ND), The Polytechnic Ibadan, Ibadan, (2005)
Honorary award, Federal School of Statistics, Ajibode, Ibadan (2015)
Fellow, Certified Business Management Professional, Unicaribbean Business School (2015)

Work Experience with Dates

I. **Previous Work Experience Outside the University System with Dates**
- **2012 –2016: Chief Analyst (Data Processing)**
  Analysts' Data Services and Resources Limited, Samonda, Ibadan
- **2006- 2008:   Sales and Finance Manager**
  Ejire Pure Water Factory, Amuloko, Ibadan

II. **Previous Work Experience in Other Universities**
- **2010-2012:   Research Assistant to the Head of Department,**
  Department Of Statistics, University Of Ibadan, Ibadan
- **2010-2012:   Assistant Lecturer,**
  Distance Learning Centre
  Department Of Statistics, University Of Ibadan, Ibadan
- **2004-2006:   Industrial Attaché**
  Academic Planning Division, University of Ibadan, Nigeria

III. **Current and Previous Work Experience within University of Medical Sciences**
- 2020-Present: Lecturer II, Department of Mathematical and Computer Sciences.
- 2017-2020: Associate Lecture, Department of Mathematics
- 2019-2020: Principal Academic Planning Officer
- 2016-2019: Senior Academic Planning Officer

Membership of Professional Bodies
Member, International Association of Statistical Education
Member, Leadership Alliance Connect
Member, Black Doctoral Network Inc.
Member, Black in Artificial Intelligrnce
Member, Nigerian Statistical Association (NSA)
Member, Professional Statistical Society of Nigeria (PSSN)
Professional Member, Institute of Informational Management, African
Fellow, Royal Statistical Society, USA

Publication
A. **Thesis**
- MSc.: Estimating Bias of Omitting Spatial Effect in Spatial Autoregressive (SAR) Model
- BSc. : Test of Stationarity on some Climatic Variables

B. **Published Journal Articles**
I. Oluyemi Adewole Okunlola and Folorunso Serifat: "Modelling Rainfall Series in the Geopolitical Zones of Nigeria", Journal of Environmental and Earth Science, Vol. 5, No 2, 2015, http://www.iiste.org/Journals/index.php/JEES/article/view/19466
II. Olusanya E. Olubusoye, Oluyemi A. Okunlola, Grace O. Korter: "Estimating Bias of Omitting Spatial Effect in Spatial Autoregressive (SAR) Model", International Journal of Statistics and Applications, Vol. 5 No. 4, 2015, pp.150-156.doi: 10.5923/j.statistics.20150504.03
http://article.sapub.org/10.5923.j.statistics.20150504.03.html

III. Okunlola Oluyemi A., Olapade Ezekiel S, Mathenge Gloria W and Folorunso Serifat A: "Multilevel Analysis on the Determinants of Birth Registration in Nigeria", *Science and Technology Publishing* (SCI & TECH) Vol. 1 Issue 8, August – 2017

IV. Adewale A. Lukman, Kayode Ayinde, Okunlola A. Oluyemi, O.B Akanbi and Onate A. Clement: "Classification-Based Ridge Estimation Techniques of Alkhamisi Methods", Journal of Probability and Statistical Sciences, 16(2), 165-181, August 2018

V. Ajayi Samuel Abiodun, Okunlola Oluyemi Adewole, Tony Ikechukwu Nnwanji, Otekunrin Adegbola Olubukola, Oladipo Olufemi Adebayo, Awonusi, Frank Dayo : Comparative Analysis of Public Debt Management and Economic Growth in Nigeria, Ilorin Journal of Finance, University of Ilorin (2018)

VI. Oluyemi A. Okunlola and Oyetunde T. Oyeyemi; Spatial-Temporal Analysis of Association between Incidence of Malaria and Environmental Predictors of Malaria Transmission in Nigeria, Scientific Reports volume 9, Article number: 17500 (2019) https://www.nature.com/articles/s41598-019-53814-x

VII. Okunlola Oluyemi Adewole, Masade Emilomo Omons, Lukman Adewale Folaranmi and Ajayi Samuel Abiodun: Investigating Causal Relationship Between Financial Development Indicators and Economic Growth: Toda and Yamamoto Approach, Iranian Economic Review 24(1):225-246 (January, 2020)

VIII. Wilfred Aghahekokhian Iguodala, Friday Ebodaghe Okonofua, Oluseyi Ademola Adejumo, Oluyemi Adewole Okunlola: Views of Students on Qualities Expected of their Lecturers: A Case Study of the University of Medical Sciences, Ondo city, Nigeria. Pan African Medical Journal. 2020; 35:64. [doi: 10.11604/pamj.2020.35.64.16597] (March, 2020)

IX. Oyetunde Oyeyemi, Victoria Oladoyin, Oluyemi Okunlola, Akinola Mosobalaje, Ifeoluwa Oyeyemi, Wasiu Adebimpe, Roseangela Nwuba, Iyadunni Anuoluwa, Adebisi Tiamiyu, Oghale Ovuakporie-uvo, Isaac Adesina, Babawale Olatunji, Yinka Oluwafemi, Caleb Obajaja, Abiodun Ajiboye: COVID-19 pandemic: An Online Based Survey of Knowledge, Perception and Adherence to Preventive Measures among Educated Nigerian Adults. Journal of Public Health, December 3, 2020 [doi: 10.1007/s10389-020-01455-0]

X. O T Oyeyemi, O A Okunlola and A D Adebayo : Assessment of Schistosomiasis endemicity and preventive treatment on coronavirus disease 2019 outcomes in Africa, New Microbes and New Infections, Volume 38, November 2020, https://doi.org/10.1016/j.nmni.2020.100821

XI. Oluyemi A. Okunlola, Oyetunde T. Oyeyemi and Adewale F. Lukman: Modeling the relationship between malaria prevalence and insecticide-treated bed net coverage in Nigeria using a Bayesian spatial generalized linear mixed model with a Leroux prior, Epidemiology and Health 2021; 43: e2021041. https://doi.org/10.4178/epih.e2021041

XII. Okunlola, O.A., Alobid, M., Olubusoye, O.E. *et al.* Spatial regression and geostatistics discourse with empirical application to precipitation data in Nigeria. *Scientific Reports* 11, 16848 (2021). https://doi.org/10.1038/s41598-021-96124-x

XIII. Okunlola OA and Oyetunde OT: Malaria transmission in Africa: Its relationship with yellow fever and measles, PLoS ONE 17(5): e0268080. https://doi.org/10.1371/journal.pone.0268080 , May 4, 2022.

XIV. Okunlola, O., Adebimpe, W., Ibirongbe, D., Osunmakinwa, O., Awe, O., Adetokunbo, S., & Lukman, A.: Factors Associated with Caesarean Delivery in Nigeria: a Generalized Linear Mixed Logistic Regression Analysis Using Adaptive Gaussian

Quadrature Technique. *Journal of Epidemiological Society of Nigeria*, 2022 *4*(2), 27–38. https://doi.org/10.5281/zenodo.6446080

XV. Ogundele, LT, Okunlola, OA, Alobid, M.; Szűcs, I.; Kassouri, Y. Sources and Sectoral Trend Analysis of CO_2 Emissions Data in Nigeria Using a Modified Mann-Kendall and Change Point Detection Approaches. *Energies* 2022, *15*, 766. https://doi.org/10.3390/en15030766

XVI. Yacouba Kassouri and Oluyemi Adewole Okunlola: Analysis of spatio-temporal drivers and convergence characteristics of urban development in Africa, Land use policy, Volume 112, January 2022, 105868, https://doi.org/10.1016/j.landusepol.2021.105868

XVII. Osunmakinwa O O, Oladoyin V O, Okunlola O, et al. Addressing Malnutrition in Children: An Appraisal of the Ondo State Nutrition Program. Cureus 14(8): e28595. doi:10.7759/cureus.28595, August 30, 2022.

XVIII. Oluyemi Adewole Okunlola & Yacouba Kassour. Empirical Investigation of the Agriculture-Malnutrition Nexus in Africa: Spatial Clustering and Spillover Effects, Review of Development Economics, 25 January 2023 https://doi.org/10.1111/rode.12973

XIX. Adewale F. Lukman, Rasha A. Farghali, B. M. Golam Kibria & Okunlola A. Oluyemi: Robust-stein estimator for overcoming outliers and multicollinearity, *Sci Rep* **13**, 9066, June 5, 2023. https://doi.org/10.1038/s41598-023-36053-z

XX. Oyeyemi, O.T., Okunlola, O.A. Soil-transmitted helminthiasis (STH) endemicity and performance of preventive chemotherapy intervention programme in Nigeria (in year 2021). *Sci Rep* **13**, 10155, June 22, 2023. https://doi.org/10.1038/s41598-023-37402-8

XXI. OA Okunlola, OR Oyerinde, ID Fashina, OT Oyeyemi: Vaccination compliance of selected childhood immunization programs and the socio-determinant factors in Nigeria, The Journal of Infection in Developing Countries, Volume 17, issue 10, 1466-1473, October 31, 2023.

XXII. Oyetunde T. Oyeyemi, Oluyemi A. Okunlola, Zhiqiang Fu, Yang Hong, Jun-Hu Chen, Lisa M. Shollenberger: Livestock cattle as a predictor of schistosomiasis transmission in Nigeria, The Microbe, Volume 1, December 2023, 100021, https://doi.org/10.1016/j.microb.2023.100021

XXIII. Okunlola, O., Oloja, S., Ebiwonjumi, A. & Oyeyemi, O: Vegetation index and livestock practices as predictors of malaria transmission in Nigeria. *Sci Rep* **14**, 9565, April 26, 2024. https://doi.org/10.1038/s41598-024-60385-z

Edited and Referred Conference Proceedings

I. **Okunlola Oluyemi (2014):** Time Series Modelling of Rainfall in the Geo-Political Zones of Nigeria: *2nd Annual Conference of Environmental Health Sciences (2014), University of Ibadan Conference Centre*

II. **Okunlola et al**. (2022): Benchmark Regulation and Delivery Of Statistics Education at the University Level in Nigeria, 11th International Conference on Teaching Statistics, Rosario, Argentina

III. **Oluyemi Adewole Okunlola** & Olusanya Elisa Olubusoye (2023): Supervised Machine Learning Binary Classification Algorithms and Performance Evaluation in the Prediction of Full Childhood Immunization, 5th International Conference on Scientific Research, Faculty of Science, University of Ibadan, Nigeria

IV. Oluyemi Adewole Okunlola, Peter Oseghale Ohue, Yacouba Kassouri, Ademile Helen, Gloria Mathenge Quantifying the Spillover Effect of Agricultural

Productivity and Macroeconomic Variables on Nutritional Outcomes in Selected African Countries, 64th ISI World Statistics Congress - Ottawa, Canada(2023)

C. **Articles Accepted for Publication**

i. Efficient predictive model for coronavirus disease using Tuned Kernelised Support Vector Regression

ii. **Manuscript Submitted for Publication**

i. Regional Trends, Spatial Patterns and Determinants of Health Facility Delivery Among Women of Reproductive Age in Nigeria: A National Population Based Cross-Sectional Study, PLoS ONE

ii. Spatial Pattern and Determinants of Non-Condom Use among Sexually Active Young People in Nigeria: a population-based, cross-sectional study, BMJ Open

iii. **Paper and Work in Progress**

- Spatial Analysis and Time Trend Regression of Violence Death Counts in Nigeria
- Geospatial Machine learning characterization of under-five nutritional status
- Spatial Distribution of Children's Health Status and Association with some Socio-Economic factors in Sub-Saharan African Countries
- GIS mapping and Spatial Analysis of Ebola Diseases in Endemic Area of Ondo State.
- Trade Liberation and Environmental Degradation in African Countries
- Spatial Panel Analysis of Pollutant Emission, Energy Consumption and Economic Growth in West African Countries

iv. **Professional Accomplishment**

- Incorporation of spatial effects into ordinary least squares regression
- Pattern detection, risk factors, and geospatial mapping of some infectious diseases and epidemiological and socioeconomic variables

v. **Conferences, Seminars and Workshops Attended with Dates**

✓ Youth Empowerment Summit (YES), Abuja, 2009

✓ 35th Annual Conference of Nigerian Statistical Association held at Akure, Ondo State.

✓ 2nd Annual Conference of Environmental Health Sciences (2014) held at University of Ibadan Conference Centre.

✓ International Union of Scientific Study of Population 2017 workshop on Geospatial Demography: Combining Satellite, Survey, Census and Cellphone Data to Provide Small-area Estimates held at *Graduate School of Business, University of Cape Town, South Africa.*

✓ Big Data and Official Statistics in Africa (Virtual), June 2022

✓ 11th International Conference on Teaching Statistics with theme "Bridging the Gap: Empowering and Educating Today's Learners in Statistics" ,11 – 16 September 2022, Rosario, Argentina

✓ 5th International Conference on Scientific Research in Nigeria with the theme "Strengthening Scientific Research For National Development, 2-5 May 2023 held at Faculty of Science, University of Ibadan, Nigeria

✓ IndabaX2023 Workshop: Human-Centric AI for Digital Nigeria, 9-10 June 2023 held at Thomas Adewumi, University, Kwara State.

✓ First Faculty of Science Conference, University of Medical Sciences, Ondo

vi. **Current Research Activities**

- Theory and application of robust regularization techniques for high dimensional data
- Application of geospatial and nonspatial artificial intelligence in explaining disease outcome

vii. **Current Relevant Information**

Other Activities Within The University

- Course coordination of MAT 111 and 121
- SIWES coordinator
- Departmental Examination Officer
- Faculty Examination Officer

Courses Taught within the Current Academic Session

- ✓ Elementary Mathematics I
- ✓ Elementary Mathematics II
- ✓ Descriptive Statistics
- ✓ Basic Statistics
- ✓ Statistical Inference
- ✓ Biostatistics
- ✓ Statistical Methods in Health Information Management I
- ✓ Statistical Methods in Health Information Management II
- ✓ Demography and Social Statistics

viii. **Contributions to knowledge**

Advancement in technology has made available data with georeference information which are essenetial in drafting policies and epidemiological interventions. Signficant numbers of available articles interested in the 'cause and effect' relationship have been executed without considering the locational aspect of the data configuration in their specifications. The contribution to the knowledge in my research area was the incorporation of spatial component to statistical model specification and the possibilities of detecting hotspots of any economic and epidemiological variables which are essential for planning and execution of result oriented interventions. This aspect of research has been extended to hierarchical data structure where Bayesian approach and Integrated Laplace Approximation are used to simultaneously model both the place and space effects of data configuration as well an ongoing research to integrate geospatial information to machine learning which will permit opportunity to apply artificial intelligence techniques in predicting epidemiological outcome variables.

24 April, 2024