

16. BELLO O. A., O.D. Akanji, O.M Adetutu, F.A. Ogunolu. (2017).” The Statistical Periscope for Analyzing the Effect of Selected University Ranking Indicators on Citations Directed to The Scientific Activities in the University of Technology, Minna” 1st International Annual Conference of Nigeria Statistical Society. University Of Ibadan. <http://repository.futminna.edu.ng:6000/jspui/handle/123456789/8311>

1st INTERNATIONAL CONFERENCE

APRIL 2017

Theme:

**STATISTICAL RESEARCH
AND IT'S APPLICATIONS**

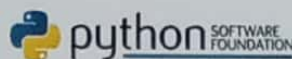
DATE :

APRIL 3-6, 2017

VENUE:

**CONFERENCE CENTRE,
University of Ibadan, Ibadan, Nigeria.**

Book of Abstracts





	A9 On the Efficiency Of a 3x3 Crossover Design and Balaam Design in Phase III Trials. <i>Chukwu. A.U. Anyadiiegwu. C.U</i>	B9 Maximum Likelihood Estimation of Maternal Mortality Rates using Statistical Distributions. <i>Osanyintupin O., Oyamakin S.O.</i>	C9 Application of Bootstrap Data Generating Processes on the Nigerian Capital Market. <i>Acha C.K., Acha I.A.</i>	D9 Intrusion Detection Technique Using Data Mining Technique. <i>Aladesote O.I., Johnson, O. V Ganiyu M.</i>
	A10 Odd Generalized Exponential Inverse-exponential Distribution (OGE-IED). <i>A. Yahaya, B. Abba</i>	B10 Association Rules Mining Approach to Binary Classification when Data are Clustered and the Response's Distribution is Imbalanced: Application to the Prediction of In-Hospital Maternal Mortality. <i>Dossou-Gbété S.</i>	C10 A Neural Network Analysis on the Effect of Selected Soil Physico-Chemical Properties on Adsorption (a case study of River Benue Basin). <i>Udomboso C.G., Nzelu N., Olu-Owolabi B.I.</i>	D10 Development and Implementation of a Mobile-Web Intelligent Career Guidance System for Pre-Tertiary Science Students in Nigeria. <i>Alao K.A., Bolarinwa I.A.</i>
11.30 – 12.00	TEA BREAK			
Chairman				
12.00 – 14.00	A11 Discrimination between the Weibull-Normal and the Generalized Weibull-Normal Distributions. <i>T.G. Ieren, A. Yahaya</i>	B11 Another Look at the Stationarity of Inflation rates in OECD countries: Application of Structural break-GARCH-based unit root tests. <i>Yaya O.S., Shittu O.I., Eita J.H.</i>	C11 Effect of Statistical Process Control for Monitoring Seeds Production: A Case Study. <i>Dikko H.G., Muhammad H.</i>	D11 An Application of 2 ⁴ Factorial Design in Concrete Block Industry. <i>Dauran N.S., Danbaba A., Muhammad A.</i>
	A12 Performance Rating of the Generalized Gompertz Nadarajah-Haghighi Distribution: An Analytical Approach.	B12 Application of Logistics Regression to the Study of Students' Performance in Mathematics. <i>Fayose T.S., Adebara L.,</i>	C12 The Statistical Periscope for Analysing the effects of Selected University Ranking Indicators on Citations Directed to the Scientific Activities in	D12 Analysis of Transaction Data for Decision Making Using Association Rules. <i>Olasehinde O., Olayemi O., Ganiyu M.</i>
	A13 Development of Autoregressive Time Series Model with Power Exponential Error Innovation. <i>Shittu O.I., Adeyemi J.O., Adesola K.A.</i>	B13 Modeling the Path of Causation among Exchange Rates of Naira to selected Foreign Currencies using Toda-Yamamoto Techniques. <i>Garba M.K., Yahya W.B., Babaita H.T., Banjoko A.W., Amobi A.O., Amusa, L.B.</i>	C13 Statistical Neural Network Analysis of Impact of Oil Spill on Land Degradation in the Niger Delta Region of Nigeria. <i>Udomboso C.G., Ilori O.O., Falode O.A.</i>	D13 The Use of R Language Queue Modeling Technique to Improving ATM Service -Point Performance. <i>Johnson O.V., Aliu A.H., Aladesote O.I.</i>
	A14 The Exponentiated Generalized New Weighted Exponential Distribution. <i>Abdulsalam H.</i>	B14 On application of Length and Area Biased distributions on Forest Data using Exponentiated Weibull Distribution. <i>Durojaiye O., Oyamakin S.O.</i>	C14 On Efficient Methods for Estimating Linear Models in the Presence of Multicollinearity and Non-Normal Error Terms: A Monte Carlo Study. <i>Yahya W.B., Garba M.K., Ajayi A.G., Dauda K.A., Olaniran O.R., Gatta N.F.</i>	D14 Identification of Gene Biomarkers for Cancer Tumour Classification using Cross-validated Area under the ROC Curve. <i>Yahaya W.B., Hapfelmeier A., Ulm K.</i>
	A15 Maximum Likelihood Parameter Estimation for the Weibull-Normal Distribution. <i>Yahaya A., Ieren T.G.</i>	B15 Modeling Infant Mortality in Nigeria: A comparison between Poisson and Negative Binomial models. <i>Dandaura E.N., Gulumbe S.U.,</i>	C15 An Investigation of Parametric and Nonparametric Bootstrap Data Generating Processes. <i>Acha C.K.</i>	D15 An Improved Method for generating Factorial Effects and their Treatment Combinations in a Full S ^k Factorial Design. <i>Dauran N.S., Danbaba A.,</i>
	A16 On the Level of Precision of a Heterogeneous Transfer Function in a Statistical Neural Network model. <i>Udomboso C.G.</i>	B16 Comparative Analysis on Students Performances in a 2 X 2 Contingency Table. <i>Fayose T.S., Makinde O.S.</i>	C16 Comparative Analysis of Statistical Neural Network and Classical Regression in Modeling Vehicular Emission. <i>Akanji S., Chukwu A.U., Adeniji O.</i>	D16 Estimating the 'Totals and Averages' in an Area (A case study of Ibadan South-West). <i>Ayansola O.A., Ogunjobi E.O., Olajide J.T.</i>
14.00 – 15.00	LUNCH BREAK			
Chairman				
15.00 – 17.00	A17 Construction of Single Method of Balanced Incomplete Sequence Crossover Design of First Order Residual Effect. <i>Adebara I., Ajayi B., Onemayin J.K., Fayose T.</i>	B17 Modeling of Gross Domestic Product (GDP) of some Sectors of Nigeria Economy in the Presence of Autocorrelation. <i>Popoola O.P., Rafiu A A., Araromi A.A., Odusina M.T., Oyenuga I.F.</i>	C17 Artificial Neural Networks Techniques for Competing Risk Modeling of Double-Blinded Randomized Clinical Trial Data. <i>Dauda K.A., Yahya W.B.</i>	D17 Application of Multivariate Analysis to the Growth of some Species of Snails. <i>Bolarinwa F., Jayeola S.M., Aladesuyi A.</i>
	A18 Ratio and Product Strategies with Unknown Weight for finite Population. <i>Audu A., Ishaq O.O., James T.O.</i>	B18 Determination Optimal Points of Borehole Water Quality Parameters estimated by the Desirability Function Approach. <i>Yusuff K.M., Otekunrin O.A., Wale-Orojo O., Lawal M., Audu A.T.</i>	C18 A Robust Technique for Fitting Ridge Regression Models. <i>Olaiifa J.B., Yahya W.B.</i>	D18 Application of 2 ^k Factorial Design to Poultry Eggs Production. <i>Owoseni D.O., Jayeola S.M., Bolarinwa F.A.</i>





seeks to suggest the use of Statistical Process Control (SPC) tools to monitor and Control quality characteristics of seeds.

Keywords: Manufacturing Process, Statistical Process Control, Control Chart, Exponentially Weighted Moving Average (EWMA).

C12

The Statistical Periscope for Analysing the effects of Selected University Ranking Indicators on Citations Directed to the Scientific Activities in the University of Technology, Minna

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Abstract

The university's research performance evaluation is often left to the external evaluators while only few of the higher institutions have internal mechanism of bibliometrics-like. The mechanism presented in this research is to help the University have a personal assessment to answer questions such as how competitive is their research and how can they demonstrate their research influence? However, bibliometrics is a valid form of assessment only it is of generalized approach; the model obtained in this work is expected to be able to periscope the unique nature of scientific activities in FUT Minna. The university raking indicators used in this research were sourced from google scholar, research gate, the University respository and through questionnaire. The observations were treated as quasi-experimental designs. The linear method of response surface methodology and Pgf plots graphical method were used. Pgf plots are visualization tool package in Latex Editor, based on tikz, a parametric plot. From the adequacy of model analyses, the causal effect of independent variables (x_i); funding, international collaboration, Staff Ranking, Equipments, number of publication on Citation were highly significant. The obtained model was used to fit possible number of citation (y) for differently assumed factors' state (values) and graphical method was used to compare each paired factors to the number of citation on 3D plots. The Citation analysis from the obtained model indicates the Expected Citation Rate (ECR) is low among the staff with high number of publications and 12% of research publication is responsible for 78.9% of citation accrued to the University. Multidisciplinary citation effect is low, however, when assumed to be high the possible number of citation increased greatly on the Pgf plots. H-index for individual staff scientific research output is little above average with ratio 1:2.6 in a year. Using contours and 3D plots, the factors; funding, international collaboration and multi-disciplinary research is at saddle point. The ratio of number of publication to citation is on the average low. Author on open access journals with high impact factor attracted more citation than authors on non-open access journals.

Keywords: Pgf plots graphical method, University ranking indicators, bibliometrics, Open Access journal, Polynomial Regression method and probability plots

C13

Statistical Neural Network Analysis of Impact of Oil Spill on Land Degradation in the Niger Delta Region of Nigeria

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Abstract

Oil spillage is one of the greatest environmental problems Nigeria is currently battling with especially in the Niger Delta region. It has resulted into widespread contamination of the environment with severe threat to immediate communities as well as sustainable development. Oil spill are major source of chemical pollution, with at least 300 different chemicals that negatively affect the surrounding soils, and hence agricultural productivity as well as quality of life. The data for this present study were obtained from the Department of Petroleum Resources as well as the Food and Agriculture Statistics 2014 Yearbook. In this paper, we forecast future spills and its corresponding effects on forest degradation using the Artificial Neural Network. The results show an alarming future unless appropriate actions are taken by the government, oil companies, as well as the communities under threat. Furthermore, this

