

# CURRICULUM VITAE

## ADEWALE LUKMAN

---

### 1. General

#### 1.1. Personal Information

Full name:	Adewale Folaranmi LUKMAN
Mailing Address:	Department of Mathematics; University of North Dakota Grand Forks, ND.
Phone and Research page	Phone: +13137756244 Email: adewale.lukman@und.edu; wale3005@gmail.com <a href="https://www.scopus.com/authid/detail.uri?authorId=57021671300">https://www.scopus.com/authid/detail.uri?authorId=57021671300</a> <a href="http://orcid.org/0000-0003-2881-1297">http://orcid.org/0000-0003-2881-1297</a> <a href="https://www.researchgate.net/profile/Adewale_Lukman3">https://www.researchgate.net/profile/Adewale_Lukman3</a>

#### 1.2. Research Interests

Applied Statistics; Computational Statistics; Machine Learning and Data Science; Biostatistics; Environmental Statistics; Pre-test and Shrinkage Estimation; Statistical Inference and Simulation Study.

#### 1.3. Modules I have taught

Applied Statistical Method; Calculus; Biostatistics; Data Science; Statistics for Biological Sciences; Statistical Inference; Probability theory and Stochastic Process; Data Analysis; Design of Experiment; Mathematical Statistics; Regression Analysis I and II; Statistics for Physical Science and Engineering; Operation Research; Medical Statistics.

#### 1.4. Education

1. PhD (Statistics), Ladoke Akintola University of Technology, Ogbomoso, Nigeria, 2014-2018.
2. MSc. (Statistics), University of Ibadan, Ibadan, Nigeria, 2011-2012.
3. BSc. (Statistics), University of Ibadan, Ibadan, Nigeria, 2005-2009.

#### 1.5. Employment

1. Assistant Professor: Department of Mathematics, University of North Dakota, Grand Forks, North Dakota. August 16 2023 till date.

2. Senior Lecturer: Department of Epidemiology and Biostatistics, University of Medical Sciences, Ondo, Nigeria. June 2021 till August 2023.

3. Lecturer II: Department of Mathematics, Landmark University, Omu-Aran, Nigeria. September 2017 till June 2021.

4. Teaching Assistant: Ladoke Akintola University of Technology, Ogbomoso, Nigeria. August 2014 to September 2017

### **1.6 Project Supervision**

6 Postgraduate student, 11 Undergraduate students.

### **1.7. Administrative Roles**

Seminar Coordinator, workshop organizer, member admission committee, statistical training, curriculum review and development, reviewer.

### **1.8. Professional Activities and Services**

#### **Committees**

Member Planning Committee for International Mathematics Day 2019-2021.

Member Operation Subscription By All Means (OSBAM) 2020-2021

Departmental Board of examiners and review from June 2021 till date.

Director for Data Science and Health metrics from August 2022.

Member Senate, University of Medical Sciences, August 2021 till date.

Member Departmental accreditation team 2019-2021; 2022 till date

#### **Review/ Editorial Service**

- Statistics in Transition new series
- Hacettepe Journal of Mathematics and Statistics
- British Journal of Mathematical and Statistical Psychology
- Journal of Modern Applied Statistical Methods
- Gazi University Journal of Science
- Communications in Statistics – Theory and Methods
- Journal of Applied Statistics
- Computational Statistics
- Journal of Chemometrics
- Communications in Statistics – Simulation and Computation
- Equity Journal of Science and Technology
- Concurrency and Computation: Practice and Experience
- Journal of Statistical Theory and Applications
- Pakistan Journal of Statistics

- Journal of Computational and Applied Mathematics
- Scientific African
- Applied Sciences
- Statistical papers
- Sustainability
- Scientific reports
- Plos One
- Mathematics and Computers in Simulation and others

### 1.9. Scholarship, Grants, Fellowship and Prizes

- |   |           |
|---|-----------|
| • Data Quest Scholarship  | 2022      |
| • Research Fellow Eotvos Lorand University                      | 2021-2022 |
| • IMU-SIMON AFRICAN FELLOWSHIP GRANT                            | 2021      |
| • CIFAR Learning in Machines & Brains program                   | 2020      |
| • International Centre for Theoretical Physics                  | 2020      |
| • Thematic Program of Centre Emile Borel by IHP & CIMPA, France | 2019      |
| • Oyo State Scholarship prize                                   | 2010      |
| • Certificate of Merit and Recognition                          | 2009      |
| • Faculty of Science Dean Roll of Honor                         | 2008      |
| • Federal Government Scholarship prize                          | 2005      |

### 1.10. Paper Published in Mainstream Statistical Journal

1. Arashi, M., **Lukman A. F.**, and Algamal, Z. Y. (2022). Liu regression after random forest for prediction and modeling in high dimension. *Journal of Chemometrics*. 2022;e3393.
2. Akram, M. N., Amin, M., Kibria, B. M. G., Arashi, M., **Lukman, A. F.** and Afzal, N. (2022). A new improved Liu estimator for the QSAR model with inverse Gaussian response. *Communications in Statistics - Simulation and Computation*. 10.1080/03610918.2022.2059088
3. Akram, M. N., Amin, M., **Lukman, A. F.** and Afzal, S. (2022). Principal component ridge type estimator for the inverse Gaussian regression model. *Journal of Statistical Computation and Simulation*, 92(10), 2060-2089. <https://doi.org/10.1080/00949655.2021.2020274>
4. **Lukman, A. F.**, Amin, M. and Kibria, B. M. G. (2021). Influence measures in gamma modified ridge type estimator, *Communications in Statistics - Simulation and Computation*. 10.1080/03610918.2021.2011925
5. **Lukman, A. F.**, Aladeitan, B., Ayinde, K., and Abonazel, M. R. (2021). Modified ridge-type for the Poisson Regression Model: Simulation and Application. *Journal of Applied Statistics*. 10.1080/02664763.2021.1889998
6. **Lukman, A. F.**, Adewuyi, E., Månsson, K. and Kibria, G. B. M. (2021). A new estimator for the multicollinear poisson regression model: simulation and application. *Scientific Reports*, 11, 3732. <https://doi.org/10.1038/s41598-021-82582-w>.
7. **Lukman, A. F.**, Ayinde, K., Binuomote, S. and Onate, A. C., (2019). Modified ridge-type estimator to combat multicollinearity: Application to chemical data. *Journal of Chemometrics*, e3125. <https://doi.org/10.1002/cem.3125>

8. Okunlola, O. A., Alobid, M., Olubusoye, O. E., Ayinde, K., **Lukman, A. F.** and Szűcs, I. (2021). Spatial regression and geostatistics discourse with empirical application to precipitation data in Nigeria. *Scientific Reports*, 11:16848.
9. **Lukman, A. F.** and Ayinde, K. (2018). Detecting Influential Observations in Two-Parameter Liu-Ridge Estimator. *Journal of Data Science*, 16(2), 207-218.
10. **Lukman, A. F.**, and Ayinde, K. (2017). Review and Classifications of the ridge parameter estimation techniques. *Hacettepe Journal of Mathematics and Statistics*, 46(5), 953-967.
11. **Lukman, A. F.**, Ayinde, K., Kibria, G. B. M. and Adewuyi, E. (2020). Modified ridge-type estimator for the gamma regression model. *Communications in Statistics - Simulation and Computation*. DOI: 10.1080/03610918.2020.1752720.

### Other Published Articles

12. **Lukman A. F.**, Kibria, B. M. G., Nziku, C. K., Amin, M., Adewuyi, E. T and Farghali, R. (2023). K-L Estimator: Dealing with Multicollinearity in the Logistic Regression Model. *Mathematics*, 11, 340. <https://doi.org/10.3390/math11020340>
13. **Lukman A. F.**, Arashi, M. and Prokaj, V. (2023). Robust biased estimators for Poisson regression model: Simulation and applications. *Concurrency Computat Pract Exper*. e7594. <https://doi.org/10.1002/cpe.7594>
14. Yaya, O. S., **Lukman, A.F.**, Vo, X. V. (2022). Persistence and volatility spillovers of bitcoin price to gold and silver prices, *Resources Policy*, 79, 103011. <https://doi.org/10.1016/j.resourpol.2022.103011>.
15. Algamal, Z. Y., **Lukman A. F.**, Abonazel, Mohamed, R. and Awwad, F. A. (2022). Performance of the Ridge and Liu Estimators in the zero-inflated Bell Regression Model. *Journal of Mathematics*. <https://doi.org/10.1155/2022/9503460>
16. **Owolabi, A. T.**, Ayinde, K., Idowu, J. I., Oladapo, O. J. and **Lukman, A.F.** (2022). New Two-Parameter Estimator in the Linear Regression Model with Correlated Regressors. *J. Stat. Appl. Pro.* 11(2): 499-512.
17. Abonazel, M. R., Dawoud, I., Awwad, F. A. and **Lukman, A. F.** (2022). Dawoud-Kibria Estimator for Beta Regression Model: Simulation and Application. *Front. Appl. Math. Stat.* 8:775068. 10.3389/fams.2022.775068
18. Dawoud, I., **Lukman, A. F.** and Haadi, A. (2022). A new biased regression estimator: Theory, simulation and application. *Scientific African*, 15, e01100. <https://doi.org/10.1016/j.sciaf.2022.e01100>.
19. Ibikunle, R. A., **Lukman, A. F.**, Titiladunayo, I. F. and Haadi, A. (2022) Modeling energy content of municipal solid waste based on proximate analysis: *R-k* class estimator approach, *Cogent Engineering*, 9:1, 2046243. 10.1080/23311916.2022.2046243
20. Jegede, S. L., **Lukman, A. F.** and Ayinde, K. (2022). Jackknife Kibria-Lukman M-Estimator: Simulation and Application. *J. Nig. Soc. Phys. Sci.* 4: 250-263.
21. Inyinbor, A. A., Adekola, F. A., Bello, O. S., Bankole, D. T., Oreofe, T. A., **Lukman, A. F.**, Olatunji, G. A. (2022). Surface functionalized plant residue in cu<sup>2+</sup> scavenging: Chemometrics of operational parameters for process economy validation, *South African Journal of Chemical Engineering*, 40: 144-153. <https://doi.org/10.1016/j.sajce.2022.03.001>.
22. Aladeitan B., **Lukman, A. F.**, Davids E. *et al.* Unbiased K-L estimator for the linear regression model. *F1000Research* 2021, 10:832. <https://doi.org/10.12688/f1000research.54990.1>
23. Aladeitan BB, Adebimpe O, **Lukman, A. F.** *et al.* Modified Kibria-Lukman (MKL) estimator for the Poisson Regression Model: application and simulation. *F1000Research* 2021, 10:548. <https://doi.org/10.12688/f1000research.53987.1>

24. Abonazel, R. M., Awwad, F. A., Nwuju, K., **Lukman, A. F.**, Lekara-Bayo, I. B., Atanu, E. Y. (2021). Long-Run Determinants of Nigerian Inflation Rate: ARDL Bounds Testing Approach. WSEAS TRANSACTIONS on BUSINESS and ECONOMICS. 10.37394/23207.2021.18.126
25. **Lukman, A. F.** and Kibria, B. M. G. (2021). Almon-KL estimator for the distributed lag model, Arab Journal of Basic and Applied Sciences, 28:1, 406-412. 10.1080/25765299.2021.1989160
26. **Lukman, A. F.**, Zakariya, A., Kibria, G. B. M. and Ayinde, K. (2021). The KL estimator for the inverse gaussian regression model. Concurrency Computat Pract Exper. e6222. <https://doi.org/10.1002/cpe.6222>.
27. **Lukman, A. F.**, Amin, M. and Kibria, B. M. G. (2021). K-L estimator for the linear mixed models: Computation and simulation. *Concurrency Computat Pract Exper.* 2021; e6780
28. Okunlola, O. A., Oyeyemi, O. T. and **Lukman, A. F.** (2021). 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*, 43: 1-9. <https://doi.org/10.4178/epih.e2021041>
29. **Lukman, A. F.**, Issam, D., Kibria, G. B. M., Zakariya, A. and Aladeitan, B. (2021). A New Ridge-Type Estimator for the Gamma Regression Model. *Scientifica*, 2021:1-8.
30. Ibikunle, R. A., **Lukman, A. F.**, Titiladunayo, I. F., Akeju, E. A. and Dahunsi, S. O. (2020). Modeling and robust prediction of high heating values of municipal solid waste based on ultimate analysis, *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*. DOI: 10.1080/15567036.2020.1841343