

Oludare Samuel ARIYO, Ph.D.

September 8, 1981

Nigerian

✉ ariyodare@gmail.com

🐦 @AriyoOludare

📄 https:

//www.linkedin.com/in/oludare-ariyo-phd-09766531/



Employment History

- 2013 – ···· 📌 **Lecturer.** Department of Statistics, Federal University of Agriculture, Abeokuta, Nigeria
- 2016 –2020 📌 **Research Scientist,** Intersivity Institutes of Biostatistics and Statistical Bioinformatics Katholieke Universiteit, (KU), Leuven, Belgium.
- 2008 –2013 📌 **Senior Statistician.** National Horticultural Research Institutes, Ibadan, Nigeria.
- 2007 –2008 📌 **Data Analyst.** The International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria.

Education

- 2016 – 2020 📌 **Ph.D., Katholieke Universiteit Leuven, Belgium.** Biostatistics.
Thesis title: *Bayesian model selection for longitudinal random-effects models.*
- 2008 – 2010 📌 **M.Sc. Federal Univeristy of Agriculture, Abeokuta, Nigeria** Statistics.
Thesis title: *Cost sensitivity for classical classification functions.*
- 2001 – 2005 📌 **B.Sc. Federal Univeristy of Agriculture, Abeokuta, Nigeria** Mathematical Sciences.
Project title: *Modelling weather variation with Cocoa Yield. .*

Teachings

- KU Leuven, Belgium 📌 Applied Biostatistics (B-KUL-Eo4NoA), Toegepaste Biostatistiek
- Federal Univ., of Agric, Abeokua, Nigeria 📌 Statistical Computing, Biostatistics, Survival Analysis, Bayesian analysis and Decisions theory, Longitudinal data Analysis, Analysis of Variance/Covariance, Biometrics Methods,...

Research Publications

Journal Articles

- 1 📌 ***Ariyo, O., & Adeleke, M.** (2021). Simultaneous Bayesian modelling of skew-normal longitudinal measurements with non-ignorable dropout. *Computational Statistics*, 1–23.
🔗 <https://link.springer.com/article/10.1007/s00180-021-01118-y>
- 2 📌 ***Ariyo, O., Lesaffre, E., Verbeke, G., Huisman, M., M., H., & Twisk, J.** (2021). Bayesian model selection for multilevel mediation models. *Statistica Neerlandica*.
🔗 <https://onlinelibrary.wiley.com/doi/10.1111/stan.12256>

- 3 ***Ariyo, O.**, Lesaffre, E., Verbeke, G., & Quintero, A. (2021). Bayesian model selection for longitudinal count data. *Sankya B.* <https://link.springer.com/article/10.1007/s13571-021-00268-9>
- 4 ***Ariyo, O.**, Quintero, A., Muñoz, J., Verbeke, G., & Lesaffre, E. (2020). Bayesian model selection in linear mixed models for longitudinal data. *Journal of Applied Statistics*, 47(5), 890–913.
<https://www.tandfonline.com/doi/full/10.1080/02664763.2019.1657814>
- 5 ***Ariyo, O.**, Lesaffre, E., Verbeke, G., & Quintero, A. (2019). Model selection for Bayesian linear mixed models with longitudinal data: Sensitivity to the choice of priors. *Communications in Statistics-Simulation and Computation*, 1–25.
<https://www.tandfonline.com/doi/abs/10.1080/03610918.2019.1676439>
- 6 Dawudo, G., Akintunde, A., & **Ariyo, O.** (2017). Stochastic prediction of monthly inflation rates through Kalman filtering. *Journal of Natural Sciences, Engineering and Technology*, 16(2), 11–25.
- 7 **Ariyo, O.**, Adeleke, M., Yusuff, M., & Wale-Orojo, O. (2017a). Comparison of non-linear mixed models fitted to longitudinal growths data of two breeds of chicken. *FUNAI Journal of Science & Technology*, 1(1), 101–108.
- 8 **Ariyo, O.**, Akintunde, A., & AdeOluwa, O. (2015). Comparison of clustering methods for different data types using rand index. *Journal of Nigeria Statistical Association*, 27(2015), 74–88.
- 9 Badmus, A., & **Ariyo, O.** (2011). Forecasting cultivation area and production of maize in nigeria using the ARIMA model. *Asia Journal of Agricultural Science*, 3(3), 171–176.
- 10 **Ariyo, O.**, & Adebajji, A. (2011). Robust linear classifier for unequal cost ratios of misclassification. *CBN Journal of Applied Statistics*, 2(1), 51–59.
<https://dc.cbn.gov.ng/cgi/viewcontent.cgi?article=1155&context=jas>
- 11 **Ariyo, O.**, Arogundade, O., & Abdul-Rafiu, M. (2011). Discriminant and classification analysis of the health status of bell pepper (*Capsicum annum*). *Research Journal of Mathematics and Statistics*, 3(2), 77–81.

Conference Proceedings

- 1 **Ariyo, O.**, & Merkle, E. (2021). Prior distributions for structured covariance matrices, In *Paper presentation at 86th International Meetings of the Psychometric Society 19-23, july*, Virtual Conference.
- 2 **Ariyo, O.**, Verbeke, G., & Lesaffre, E. (2019). Bayesian model selection for generalized linear mixed model, In *Paper presentation at 40th Annual Conference of the International Society for Clinical Biostatistics 14-18, july*, Leuven, Belgium.
- 3 **Ariyo, O.**, & Laseffre, E. (2017a). Bayesian inference for skew-normal linear mixed models with covariates measurements errors, In *38th Annual Conference of the International Society for Clinical Biostatistics 9-13 july*, Vigo, Spain.
- 4 **Ariyo, O.**, & Laseffre, E. (2017b). Comparing skew-normal linear mixed models with nonignorable dropout via observed deviance information criterion, In *61st world statistics congress to hold at marrakech, morroco 16-21 july, 2017*, Marrakech, Morroco.
- 5 **Ariyo, O.**, Quintero, A., Verbeke, G., & Lesaffre, E. (2017b). Model selection for the skew-normal linear mixed models with covariate measurements errors: A bayesian approach., In *6th IBS Channel Network Conference held at the Hasselt Univesity 9-13 july*, Diepenbeek, Belgium.

Articles under-review

- 2021+  **Ariyo, O.** Bayesian modelling of autoregressive linear mixed models for longitudinal data. **submitted to Journal of Statistical Computation and Simulation**

Articles under-review (continued)

- 📌 **Ariyo, O.**, Ramírez-Aldana, R., & Naranjo, L. A spatio-temporal study of HIV incidence in Mexico: analyses of descriptive spatio-temporal features, tendencies, clustering, and predictions by state. **submitted to Journal of Applied Statistics**
- 📌 Olobatuyi, K., & **Ariyo, O.**. Model-based Clustering via Multinomial Cluster-Weighted Models for High-Dimensional Data **Resubmitted to Journal of Classification**
- 📌 Oshoniyi, A., Dawudo, G., **Ariyo, O.**, Osinuga, I., Soyinka, T., & Ogunsola, I The Exponentiated Lomax-Exponential Distribution **submitted to STAT**
- 📌 **Ariyo, O.**. Dawodu, G., Akintunde, A., Adeleke, M & Adetona, B. Analysis of longitudinal growth data: A Bayesian versus Frequentist approach. **submitted to Journal of Nigerian Statistical Association**

Skills

- Languages 📌 Strong reading, writing and speaking competencies for English, Yoruba.
- Coding 📌 SAS, Python, R, JAGS, STAN, \LaTeX , ...
- Misc. 📌 Academic research, teaching, training, consultation, \LaTeX typesetting and publishing.

Software / Reports submitted.

R functions developed

- 2017 📌 **Ariyo, O.**, Quintero, A., Verbeke, G., and Lesaffre, E. (2017): Model selection for the skew-normal linear mixed models with covariate measurements errors: A Bayesian approach (Technical Report L-Biostat KU Leuven, Belgium 2017).
- 2019 📌 **Bayesselect**: An R function that computes conditional and marginalized DIC, WAIC and PSBF for model selection for linear mixed model with skew-normal random effects and measurement error for longitudinal data. <https://github.com/OludareAriyo>
- 2020 📌 **BayesselectGLMM**: An R function that computes conditional and marginalized DIC, WAIC and PSBF for model selection for generalised linear mixed model via replication and importance sampling. <https://github.com/OludareAriyo>

Short courses/ Trainings

- 2019 📌 Mediation analysis using R by Prof Theis Lange (University of Copenhagen, Demark) and Prof Stijn Vansteelnadt (University of Ghent, Belgium) 14-15 July, 2019 **Workshop organized by the International Society of Clinical Biostatistics, Leuven , Belgium..**
- 2018 📌 Introduction to Pairwise and Network Meta-Analysis by Prof Nicky Welton (University of Bristol, UK) 29-30 November 2018 **Organized by I-Biostat, KU Leuven, Belgium..**
- 📌 Bayesian Methods in Health Economic Evaluation by Prof Gianluca Baio (University College London, UK) 27-28 September 2018 **Organized by I-Biostat, KU Leuven, Belgium.**
- 📌 Bayesian parametric and nonparametric methods for missing data and causal inference by **Prof. Michael Daniel (University of Florida, USA) 24-28 September 2018 Organized by I-Biostat, KU Leuven, Belgium.**

Software / Reports submitted. (continued)

- 2017
- Advance Metal analysis in R. **15 July 2017 Pre-conference Workshop organized by International Statistical Institutes, Marrakech, Morocco.**
 - Advances in Adaptive Clinical Trials Design: Bayesian and Frequentist approaches **9-10 July 2007. Workshop organized by the International Society of Clinical Biostatistics, Vigo Spain**
 - International Workshop on Statistical Modelling held at **University of Groningen 3-7 July 2017 Groningen, Netherland**
 - Graphic in R, organized by Flanders Training Network for Methodology and Statistics **30 May -June 2, 2017. Leuven, Belgium.**
 - Workshop on Scientific integrity, **Katholieke Universiteit (KU) Leuven, 26, January 2017.**
- 2016
- 31st International Workshop on Statistical Modelling held at **Institut National des Sciences Appliques, Rennes, France. 4-8, July 2016.**
 - 7th Workshop dedicated to Bayesian Methodology in Pharmaceutical Research (Bayes) held at **The Leuven Institutes for Ireland, Leuven, Belgium. 17-20, May 2016.**
 - Workshop on Joint Modeling and beyond held at **Hasselt University, Diepenbeek, Belgium. 14-15, April 2016.**

References
