

CONTACT INFORMATION	140 Science Drive (Room 256) Box 90989, Durham NC 27708 Phone: (919)-681-1863 Email: olanrewaju.akande@duke.edu Web: https://akandelanre.github.io
RESEARCH INTERESTS	Bayesian modeling, models for editing erroneous data, multiple imputation, missing data, mixture models, and hierarchical modeling.
EDUCATION	<p><u>Ph.D in Statistical Science, Duke University</u> 2019 Dissertation: “Bayesian Models for Imputing Missing Data and Editing Erroneous Responses in Surveys” Advisor: Jerome P. Reiter</p> <p><u>M.S. in Statistical and Economic Modeling, Duke University</u> 2015 Thesis: “A Comparison of Multiple Imputation Methods for Categorical Data” Advisors: Jerome P. Reiter and Fan Li</p> <p><u>B.Sc. in Mathematics and Statistics, University of Lagos, Nigeria</u> 2010 First class honors</p>
RESEARCH EXPERIENCE	<p><u>Research Assistant</u> 2014 - 2019 <i>Department of Statistical Science, Duke University</i> <i>Supervisor: Dr. Jerome P. Reiter</i></p> <p>Developed nonignorable models for simultaneously dealing with unit and item nonresponse in survey data using auxiliary marginal information. Developed edit-imputation model for handling both missing data and measurement error in household data with structural zeros. Conducted empirical comparison of multiple imputation methods for categorical data.</p> <p><u>Summer Research Fellow</u> Summer 2017 <i>U.S. Food and Drug Administration</i> <i>Office of Biostatistics, Center for Drug Evaluation and Research</i> <i>Supervisors: Dr. Abel Eshete and Dr. Solomon Chefo</i></p> <p>Evaluated several missing data methods, including multiple imputation and mixed effect models, for estimating drug effectiveness in clinical</p>

trials data on ophthalmic drugs. Developed and implemented selection models for missing not at random imputations for mixed data.

PEER-REVIEWED PUBLICATIONS	<p>Akande, O., Li, F. and Reiter, J. P. (2017), “An Empirical Comparison of Multiple Imputation Methods for Categorical Data”, <i>The American Statistician</i>, 71:2, 162-170.</p> <p>Akande, O., Barrientos, A. F. and Reiter, J. P. (2018), “Bayesian Simultaneous Edit and Imputation For Household Data with Structural Zeros”, <i>Journal of Survey Statistics and Methodology</i>, 0, 1-22.</p> <p>Akande, O., Reiter, J. P. and Barrientos, A. F. (2019), “Multiple Imputation of Missing Values in Household Data with Structural Zeros”, <i>Survey Methodology</i>, Statistics Canada, Catalogue No. 12-001-X, Vol. 45, No. 2.</p>
SUBMITTED MANUSCRIPTS	<p>Akande, O. and Reiter, J. P., “Multiple Imputation for Nonignorable Item Nonresponse in Complex Surveys Using Auxiliary Margins”.</p>
ARTICLES IN PREPARATION	<p>Akande, O., Madson, G., Hillygus, D. S. and Reiter, J. P., “Leveraging Auxiliary Information on Marginal Distributions in Nonignorable Models for Item and Unit Nonresponse in Surveys”, in preparation.</p>
SOFTWARE PACKAGES	<p>NestedCategBayesImpute: Modeling & Generating Synthetic Versions of Nested Categorical Data in the Presence of Impossible Combinations (Wang, Q., Akande, O., Hu, J., Reiter, J.P. and Barrientos, A.,)</p>
PRESENTATIONS AND POSTERS	<p>“Leveraging Auxiliary Information on Marginal Distributions in Nonignorable Models for Item and Unit Nonresponse in Surveys”</p> <ul style="list-style-type: none"> • Duke Department of Statistical Science STA701 Seminar Series (2019) • Society for Political Methodology, Brigham Young University, Utah (2018) <p>“Bayesian Simultaneous Edit and Imputation For Household Data with Structural Zeros”</p> <ul style="list-style-type: none"> • Joint Statistical Meetings, Vancouver, BC, Canada (2018) • Advances in Interdisciplinary Statistics and Combinatorics, Greensboro NC (2018) • Duke Department of Statistical Science STA701 Seminar Series (2018)

“Multiple Imputation of Missing Values in Household Data with Structural Zeros”

- Duke Department of Statistical Science STA701 Seminar Series (2017)

TEACHING
EXPERIENCE

Instructor of Record

Department of Statistical Science, Duke University

STA 111: Probability and Statistical Inference¹

Summer 2018

Summer 2016

Summer 2014

Teaching Assistant

Department of Statistical Science, Duke University

STA 440: Case Studies (senior undergrad)

Fall 2018

STA 723: Statistics Case Studies (PhD level)

Spring 2018

STA 732: Theoretical Statistics (PhD level)

Spring 2017

STA 111: Probability and Statistical Inference

Spring 2014

Guest Lecturer

Department of Statistical Science, Duke University

STA 210: Regression Analysis (undergrad)

Fall 2018

STA 723: Statistics Case Studies (PhD level)

Spring 2018

TEACHING
TRAINING

Duke Certificate in College Teaching Program

2019

Coursework:

- GS 755: College Teaching and Course Design
- STA 771S: Teaching Statistics

Spring 2018

Spring 2016

Other training:

- Teaching Observation (Teaching Triangles)

Summer 2018

OTHER WORK
EXPERIENCE

Analyst

2012 - 2013

KPMG Professional Services, Nigeria

Internal Audit, Risk and Compliance Services

Analyst

2011

Aterios Capital Limited, Lagos, Nigeria

Asset Management Division

¹Evaluation reports available upon request.

AWARDS	<u>Presidential Special Scholarship for Innovation & Dev.</u> <i>Federal Government of Nigeria</i> M.Sc./Ph.D scholarship	2012 - 2015
SERVICE	<u>Student Mentor</u> for incoming PhD students <i>Department of Statistical Science, Duke University</i> <u>ASA DataFest@Duke Co-organizer and Instructor</u> <i>Department of Statistical Science, Duke University</i>	2018 2017 and 2018
REFERENCES	Available on request	