2011

CONTACT Social Science Research Institute Phone: (919)-681-1863 Information 140 Science Drive, 256 Gross Hall Email: olanrewaju.akande@duke.edu Web: https://akandelanre.github.io Box 90989, Durham NC 27708 Bayesian modeling, models for editing erroneous data, multiple imputation, Research Interests missing data, mixture models, and hierarchical modeling. EDUCATION Ph.D. in Statistical Science, Duke University 2019 Dissertation: "Bayesian Models for Imputing Missing Data and Editing Erroneous Responses in Surveys" Advisor: Jerome P. Reiter M.S. in Statistical and Economic Modeling, Duke University 2015 Thesis: "A Comparison of Multiple Imputation Methods for Categorical Data" Advisors: Jerome P. Reiter and Fan Li B.Sc. in Mathematics and Statistics, University of Lagos, Nigeria 2010 First class honors Positions Instructor 2019 - present Social Science Research Institute, Duke University Research Assistant 2014 - 2019 Department of Statistical Science, Duke University Summer 2017 Summer Research Fellow U.S. Food and Drug Administration Analyst 2012 - 2013 KPMG Professional Services, Nigeria

Publications:
Peer-reviewed
& Invited
Papers

Analyst

- 1. **Akande, O.**, Reiter, J. P., and Barrientos, A. F. (2019), "Multiple Imputation of Missing Values in Household Data with Structural Zeros," *Survey Methodology*, 45:2, 271-294.
- 2. **Akande, O.**, Barrientos, A. F., and Reiter, J. P. (2018), "Simultaneous Edit and Imputation For Household Data with Structural Zeros," *Journal of Survey Statistics and Methodology*, 0, 1-22.

Aterios Capital Limited, Lagos, Nigeria

3. Akande, O., Li, F., and Reiter, J. P. (2017), "An Empirical Comparison of Multiple Imputation Methods for Categorical Data," *The American Statistician*, 71:2, 162-170.

## Publications: Manuscripts Under Review

- 4. **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," submitted to *Journal of the Royal Statistical Society A.* [arXiv Link]
- 5. **Akande, O.** and Reiter, J. P., "Multiple Imputation for Nonignorable Item Nonresponse in Complex Surveys Using Auxiliary Margins," in volume in memory of Steve Fienberg, Springer.
- 6. Hu, J., **Akande, O.**, and Wang, Q., "Data imputation and data synthesis with the R package NPBayesImputeCat," submitted.

# Publications: Articles in Preparation

7. **Akande, O.**, Hu, J., Wang, Q., and Reiter, J. P., "Edit-Imputation and Synthetic Data Generation For Household Data with the R package NestedCategBayesImpute," in preparation.

# Presentations, Workshops & Posters

- 1. "Leveraging Auxiliary Information on Marginal Distributions in Nonignorable Models for Item and Unit Nonresponse in Surveys," Contributed talk at Joint Statistical Meetings, Denver, CO. July 2019.
- 2. "Leveraging Auxiliary Information on Marginal Distributions in Nonignorable Models for Item and Unit Nonresponse in Surveys," Department of Statistical Science seminar series talk at Duke University, Durham, NC. March 2019.
- "Handling Missing Data and Faulty Responses in Household Data," Invited faculty candidate seminar talk at University of Toronto, ON, Canada. January 2019.
- 4. "Handling Missing Data and Faulty Responses in Household Data," Invited faculty candidate seminar talk at Bucknell University, Lewisburg, PA. December 2018.
- 5. "Handling Missing Data and Faulty Responses in Household Data," Invited faculty candidate seminar talk at Duke University, Durham, NC. November 2018.
- 6. "Bayesian Simultaneous Edit and Imputation For Household Data with Structural Zeros," Contributed talk at Advances in Interdisciplinary Statistics and Combinatorics, Greensboro NC. October 2018.
- 7. "Bayesian Simultaneous Edit and Imputation For Household Data with Structural Zeros," Contributed talk at Joint Statistical Meetings, Vancouver, BC, Canada. July 2018.
- 8. "Leveraging Auxiliary Information on Marginal Distributions in Nonignorable Models for Item and Unit Nonresponse in Surveys," Contributed

- poster at Society for Political Methodology, Brigham Young University, Provo, UT. July 2018.
- 9. "Bayesian Simultaneous Edit and Imputation For Household Data with Structural Zeros," Seminar talk at Duke University, Department of Statistical Science. January 2018.
- 10. "Multiple Imputation of Missing Values in Household Data with Structural Zeros," Department of Statistical Science seminar series talk at Duke University, Durham, NC. February 2017.

### Teaching

<u>Instructor</u>, Social Science Research Institute, Duke University

- IDS 702: Modeling and Representation of Data

Fall 2019

Instructor, Department of Statistical Science, Duke University

- STA 111: Probability and Statistical Inference Summer 2014,

Summer 2016, Summer 2018

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 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

### Software

NestedCategBayesImpute: R package for 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.)

### AWARDS

Presidential Special Scholarship for Innovation & Dev.

2013 - 2015

Federal Government of Nigeria Full funding for masters degree

University of Lagos Endowment Scholarship Program

2009 - 2010

Award for first class students

### TEACHING TRAINING

Duke Certificate in College Teaching Program

2019

Professional Service Journal Reviews: Demographic Research

University Service	Student Mentor for incoming Ph.D. students  Department of Statistical Science, Duke University	2018
	ASA DataFest@Duke Co-organizer and Instructor Department of Statistical Science, Duke University	2017 - 2019
Professional Affiliations	American Statistical Association Society for Political Methodology	