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| CONTACT<br>INFORMATION                                | Social Science Research Institute<br>140 Science Drive, 256 Gross Hall<br>Box 90989, Durham NC 27708   | Phone: (919)-681-1863<br>Email: <a href="mailto:olanrewaju.akande@duke.edu">olanrewaju.akande@duke.edu</a><br>Web: <a href="https://akandelanre.github.io">https://akandelanre.github.io</a> |
| RESEARCH<br>INTERESTS                                 | Bayesian modeling, models for editing erroneous data, multiple imputation, missing data, mixture models, and hierarchical modeling.  |  |
| EDUCATION   | <u>Ph.D. in Statistical Science, Duke University</u> 2019<br>Dissertation: “Bayesian Models for Imputing Missing Data and Editing Erroneous Responses in Surveys”<br>Advisor: <a href="#">Jerome P. Reiter</a><br><br><u>M.S. in Statistical and Economic Modeling, Duke University</u> 2015<br>Thesis: “A Comparison of Multiple Imputation Methods for Categorical Data”<br>Advisors: <a href="#">Jerome P. Reiter</a> and <a href="#">Fan Li</a><br><br><u>B.Sc. in Mathematics and Statistics, University of Lagos, Nigeria</u> 2010<br>First class honors |  |
| POSITIONS   | <u>Assistant Professor of the Practice</u> 2019 – present<br><i>Social Science Research Institute, Duke University</i><br><br><u>Research Assistant</u> 2014 – 2019<br><i>Department of Statistical Science, Duke University</i><br><br><u>Summer Research Fellow</u> Summer 2017<br><i>U.S. Food and Drug Administration</i><br><br><u>Analyst</u> 2012 – 2013<br><i>KPMG Professional Services, Nigeria</i><br><br><u>Analyst</u> 2011<br><i>Aterios Capital Limited, Lagos, Nigeria</i>   |  |
| PUBLICATIONS:<br>PEER-REVIEWED<br>& INVITED<br>PAPERS | <ol style="list-style-type: none"> <li>1. <b>Akande, O.</b>, Reiter, J. P., and Barrientos, A. F. (2019), “<a href="#">Multiple Imputation of Missing Values in Household Data with Structural Zeros</a>,” <i>Survey Methodology</i>, 45:2, 271-294.</li> <li>2. <b>Akande, O.</b>, Barrientos, A. F., and Reiter, J. P. (2018), “<a href="#">Simultaneous Edit and Imputation For Household Data with Structural Zeros</a>,” <i>Journal of Survey Statistics and Methodology</i>, 0, 1-22.</li> </ol>   |  |

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,” revision 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. “Multiple Imputation for Nonignorable Item Nonresponse in Complex Surveys Using Auxiliary Margins,” Contributed talk at Joint Statistical Meetings. August 2020.
2. “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.
3. “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.
4. “Handling Missing Data and Faulty Responses in Household Data,” Invited faculty candidate seminar talk at University of Toronto, ON, Canada. January 2019.
5. “Handling Missing Data and Faulty Responses in Household Data,” Invited faculty candidate seminar talk at Bucknell University, Lewisburg, PA. December 2018.
6. “Handling Missing Data and Faulty Responses in Household Data,” Invited faculty candidate seminar talk at Duke University, Durham, NC. November 2018.
7. “Bayesian Simultaneous Edit and Imputation For Household Data with Structural Zeros,” Contributed talk at Advances in Interdisciplinary Statistics and Combinatorics, Greensboro NC. October 2018.
8. “Bayesian Simultaneous Edit and Imputation For Household Data with

Structural Zeros,” Contributed talk at Joint Statistical Meetings, Vancouver, BC, Canada. July 2018.

9. “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.
10. “Bayesian Simultaneous Edit and Imputation For Household Data with Structural Zeros,” Seminar talk at Duke University, Department of Statistical Science. January 2018.
11. “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

Instructor, *Social Science Research Institute, Duke University*

- IDS 702: Modeling and Representation of Data Fall 2020  
Fall 2019

Instructor, *Department of Statistical Science, Duke University*

- STA 360: Bayesian and Modern Statistics Summer II 2020
- STA 602L: Bayesian and Modern Statistics Summer II 2020  
Spring 2020
- STA 111: Probability and Statistical Inference Summer I 2018  
Summer I 2016  
Summer II 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 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.)

## TEACHING TRAINING

Duke Certificate in College Teaching Program

2019

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| PROFESSIONAL<br>SERVICE      | <u>Journal Reviews: Demographic Research</u>   |                               |
| UNIVERSITY<br>SERVICE        | <u>Admissions Committee Co-Chair</u><br><i>MIDS Program, SSRI, Duke University</i>   | 2020 - present                |
|                              | <u>Student Mentor</u> for incoming Ph.D. students<br><i>Department of Statistical Science, Duke University</i>                               | 2018                          |
|                              | <u>ASA DataFest@Duke Co-organizer and Instructor</u><br><i>Department of Statistical Science, Duke University</i>                            | 2017 – 2019                   |
| PROFESSIONAL<br>AFFILIATIONS | American Statistical Association<br>Society for Political Methodology  | 2017 – present<br>2018 – 2019 |
| AWARDS                       | <u>Presidential Special Scholarship for Innovation &amp; Dev.</u><br><i>Federal Government of Nigeria</i><br>Full funding for masters degree | 2013 – 2015                   |
|                              | <u>University of Lagos Endowment Scholarship Program</u><br>Award for first class students   | 2009 – 2010                   |