

## Huybrechts Frazier Achard Bindele

Department of Mathematics and Statistics, MSPB 325, University of South Alabama, AL  
36688-0002

Phone: (251)460-7294, Fax: (251)460-7969, Email: [hbindele@southalabama.edu](mailto:hbindele@southalabama.edu)

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### Professional Preparation

Université Marien Ngouabi, Congo	B.Sc.	2003	Mathematics
Université Marien Ngouabi, Congo	M.Sc.	2004	Mathematics
ICTP, Trieste, Italy	M.Sc. Diploma	2007	Mathematics
Auburn University, USA	Ph.D.	2012	Statistics

### Appointments

August 2018 - Present	Associate Professor, Mathematics and Statistics, University of South Alabama.
August 2012 - June 2018	Assistant Professor, Mathematics and Statistics, University of South Alabama.
2008 - 2012	Graduate Teaching Assistant, Mathematics and Statistics, Auburn University.

### Ongoing Working Papers

1. Bindele H. F. , Otladisa O. , Abebe A. and Correia H. Robust Functional Empirical Likelihood for the Varying Coefficients Single-Index Models
2. Atutey O. Bindele H. F. Robust Variable Selection for the Linear Mixed Effects Models.
3. Bindele H. F. and Affuso E. Robust Inference for the stochastic frontier model.
4. Bindele H. F. High dimensional regression under the generalized signed-rank.
5. Bindele H. F. and Matsouaka R. Robust estimation in time-dependent models.
6. Nguelifack N. G. , Bindele H. F. and Abebe A. Signed-rank estimation for nonlinear spatial trends.

### Submitted Papers

1. Bindele H. F. and Atutey O. Empirical Likelihood Variable Selection for the High Dimensional Single-Index Regression Model.

### Accepted & Published Papers

1. Peter O. Peter, B. Oluyede, N. Ndwapi, O. Mabikwa & H. F. Bindele. (2022). The new family of Ristić-Balakhrihnan Marshall Olkin-G distributions with properties and applications , *International Journal of Mathematics in Operational Research*, 22(3).
2. Bindele H. F., Denhere M. and Sun W. Generalized signed-rank estimation and selection for the functional linear model. *Statistics*, in Press.
3. B. Oluyede, Peter O. Peter, N. Ndwapi & H. F. Bindele. (2022). The Exponentiated Half-logistic Odd Burr III-G: Model, Properties and Applications, *Pakistan Journal of Statistics and Operation Research*, 18(1), 33-57.
4. Otladisa M., Bindele H. F., Abebe A. and Correia H. (2022). Varying coefficient single-index regression model with missing responses under rank-based modeling, *Journal of Nonparametric Statistics*, <https://doi.org/10.1080/10485252.2022.2047677>

5. Peter O. Peter, B. Oluyede, H. F. Bindele, N. Ndwapi & O. Mabikwa (2021). The Gamma Odd Burr III-G Family of Distributions: Model, Properties and Applications, *Revista Colombiana de Estadística*, 44(2), 331-368.
6. Adekpedjou A. and Bindele H. F. (2021). Rank-Based Inference for Survey Sampling Data. *Journal of Survey Statistics and Methodology*, <https://doi.org/10.1093/jssam/smab019>.
7. Peter O. Peter, B. Oluyede, N. Ndwapi & H. F. Bindele. (2021). The Weibull Odd Burr III-G Family of Distributions with Properties and Applications, *Journal of Statistical Modeling: Theory and Applications*, 2(1), 151-180.
8. Wei S., Bindele H. F., Abebe A. and Correia H. (2021). Robust functional coefficient selection for single-index varying coefficient models. *Journal of Statistical Computation and Simulation*, 91(8), 1681-1697.
9. Abebe A., Bindele H. F., Otladisa M. and Boikanyo M. (2020). Robust Estimation of Single Index Models with Responses Missing at Random. *Statistical Papers*, 62, pages 2195–2225.
10. Bindele H. F. and Nguelifack B. (2019). Generalized signed-rank estimation for regression models with non-ignorable missing responses. *Computational Statistics and Data Analysis*, 139, 14-33.
11. Wei S., Bindele H. F., Abebe A. and Correia H. (2019). General local rank estimation for single-index varying coefficient models. *Journal of Statistical Planning and Inference* 202: 57-79.
12. Bindele H. F., Abebe A. and Zeng P. (2019). Robust estimation and selection for the regression single model, *Journal Statistical Computation and Simulation*, 89(8), 1376–1393.
13. Bindele H. F. and Adekpedjou A. (2018). Rank-based inference with responses missing not at random, *Canadian Journal of Statistics*, 46(3), 501-528.
14. Bindele H. F. and Zhao Y. (2018). Rank-based empirical likelihood for regression models with responses missing at random, *New frontier in Biostatistics and Bioinformatics, Springer International Publishing*. Cham, pages: 67-86.
15. Bindele H. F. (2018). Covariates missing at random under signed-rank Inference, *Econometrics and Statistics*, 8, 78-93.
16. Bindele H. F. and Abebe A. and Meyer K. N. (2018). Robust confidence regions of the rank estimator under a semi-parametric regression model with responses missing at random, *Statistics*, 52(4), 885-900.
17. Oluyede B., Bindele H. F., Makubate B. and Hoang S. (2018). A New generalized log-logistic and modied Weibull distribution with applications, *International Journal of Statistics and Probability*, 7(3), 1927-7040.
18. Bindele H. F., Abebe A. and Meyer K. N. (2018). General rank-based estimation for regression single index models, the *Annals of the institute of the Statistical Mathematics*, 70(5), 1115-1146.
19. Bindele H. F. and Zhao Y. (2017). Rank-based estimating equation with non-ignorable missing responses via empirical likelihood, *Statistica Sinica*, 28, 1787-1820.

20. Bindele H. F. (2017). Strong Consistency of the General Rank Estimator, *Communication in Statistics: Theory and Methods*, 46(2), 532-539.
21. Tara M. Davis, Benjamin D. Hill, Kelli Evans, Shelby Tiffin, Nicholas Stanley, Kelly Fields, Katherine Russ, Bindele H. F. and Susan Gordon-Hickey (2016). P300 Event-Related Potentials Differentiate Better Performing Individuals with Traumatic Brain Injury: A Preliminary Study of Semantic Processing, *Journal of Head Trauma Rehabilitation*, in press.
22. Denhere M. and Bindele H. F. (2016). Rank Estimation for the Functional Linear Model, *Journal of Applied Statistics*, 43(10):1928–1944.
23. Bindele H. F. and Zhao Y. (2016). Signed Rank Regression Inference via Empirical likelihood, *Journal of Statistical Computation and Simulation*, 86(10), 1928–1944.
24. Abebe A. and Bindele H. F. (2016). Robust Signed-Rank Variable Selection in Linear Regression, Springer International Publishing, Cham, 25–45, [http://dx.doi.org/10.1007/978-3-319-39065-9\\_2](http://dx.doi.org/10.1007/978-3-319-39065-9_2).
25. Day J., Irion J., Anile M., Henson J., Roussel B., Shepherd C. and Bindele H. F. (2015). Home Exercise Adherence in an Underserved Ecuadorian Community, *Journal of Physical Therapy and Health Promotion*, 3(3):39-46.
26. Bindele H. F. and Abebe A. (2015). Semi-parametric Rank Regression with Missing Responses, *Journal of Multivariate Analysis*, 142, 117–132.
27. Bindele H. F. (2015). The Signed-Rank Estimator for Nonlinear Regression with Responses Missing at Random, *Electronic Journal of Statistics*, 9, 1424–1448.
28. Bindele H. F. (2013). Asymptotics of the Signed-Rank Estimator under Dependent Observations. *Journal of Statistical Planning and Inference*, 146, 49–55.
29. Bindele H. F. and Abebe A. (2012). Bounded Influence Nonlinear Signed-Rank Regression. *Canadian Journal of Statistics*, 40, 172–189.
30. Abebe A., McKean J. W. and Bindele H. F. (2012). On the Consistency of a Class of Nonlinear Regression Estimators. *Pakistan Journal of Statistics and Operations Research*, 8(3), 543–555.

**Courses taught** Duties at various times have included office hours and leading weekly computer lab exercises. I have taught undergraduate and graduate level courses with full responsibility for lectures, exams, homework assignments, and grades.

- Pre-Calculus Algebra and Trigonometry
- College Algebra
- Topics in Linear Algebra and Differential Equations,
- Calculus with Business applications II
- Statistics for Biological and Health Sciences
- Probability and Statistics II
- Finite Math and Applications
- Statistical Reasoning and Applications

- Probability and Statistics for Engineers
- Applied Regression Analysis
- Applied Nonparametric Statistics
- Advanced Time Series Analysis
- Advanced Design and Analysis of Experiments
- Survey Sampling Analysis
- Theory of Statistics

**Tutor for graduate level course**

**May - August, 2009,2010**

Office of Diversity & Multicultural Affairs, Auburn University

- Real Analysis, Stochastic processes and Statistical Inference, Summer 2009.
- Real Analysis, Stochastic processes and Linear Algebra , Summer 2010.
- Advanced Linear Models

**Past and Current Synergistic Activities**

- Associate Editor in the Journal of Statistical Computation and Simulation
- Referee to the Journal of Multivariate Analysis, the Journal of Statistical Planning and Inference, the Austrian Journal of Statistics, the IEEE Transaction on Signal Processing, Journal of Nonparametric Statistics, Communication in Statistics: Theory and Methods, and Computation and Simulation, the Journal of Statistical Computation and Simulation, and the American Journal of Mathematical and Management Sciences.
- Graduate, Colloquium and Seminar Series, Library, Scholarship, Curriculum, Advisory, Program Review and Hiring Departmental Committees, University of South Alabama.
- External Reviewer for Multiple Tenures and Promotions.
- College of Arts and Sciences Diversity Committee, University of South Alabama.
- College of Arts and Sciences Academic Programs and Planning Committee, University of South Alabama.

**Collaborators & Other Affiliations**

**PhD Students Directed:**

Wei Sun (Auburn University, completed), Masego Otladisa (BIUST, completed)

**Collaborators and co-Editors:** Asheber Abebe (Auburn University), Joseph W. McKean (Western Michigan University), Brice Merlin Nguelifack (US Naval Academy), Akim Adekpedjou (Missouri University of Science and Technology), Rolland Matsouaka (Duke University), Broderick Oluyede (Georgia Southern University), Yichuan Zhao (Georgia State University), Affuso Ermanno (University of South Alabama), Olivia Atutey (University of South Alabama), Melody Denerhe (University of Mary Washington), Karlene N. Meyer (Georgetown University).

### **Thesis and Graduate Advisors:**

Asheber Abebe (PhD, Auburn University).

Charles Chidume (Master-Diploma, ICTP, Trieste Italy)

### **Past/Recent Workshop, Conference and Seminar Presentations**

- Seminars on Robust Statistical Methods, Dept. of Mathematics and Statistical Science, BIUST, Botswana, May-July, 2022
- Invited talk, Trojan Math Seminar, Department of Mathematics and Statistics, Troy University, January 20, 2022.
- Invited talk, Departmental Colloquia, Department of Mathematics, University of North Georgia, November 17, 2021.
- The Central Botswana Mathematical and Statistical Sciences Conference (CBMSSC), Session Organizer, Dept. of Mathematics and Statistical Science, BIUST, Botswana, June 18, 2021.
- Seminars on Rank-Based Methods with Its Applications, Dept. of Mathematics and Statistical Science, BIUST, Botswana, May-July, 2021
- Invited talk, Departmental Colloquia, Department of Mathematical Science, Georgia State University, January 22, 2021.
- Invited talk, Departmental Colloquia, Department of Mathematics and Statistics, Mississippi State University, March 19, 2019.
- The 6th Workshop on Biostatistics and Bioinformatics, Georgia State University, Atlanta, GA, May 4 - 6, 2018.
- Invited talk, Departmental Colloquia, Department of Mathematics and Statistics, Georgia State University, February 23, 2018.
- Invited talk, Departmental Colloquia, Department of Mathematical Science, Georgia Southern University, October 13, 2017.
- The South Regional Council of Statistics (SRCOS), Jekyll Island, Georgia, June 4 - 7, 2017.
- The 5<sup>nd</sup> Workshop on Biostatistics and Bioinformatics, Georgia State University, Atlanta, GA, May 5 - 7, 2017.
- The IMS-NRC conference, Madison, WI, July 28 - 30, 2016
- The 25th ICSA Applied Statistics Symposium, Atlanta, GA, June 12 - 15, 2016.
- The South Regional Council of Statistics (SRCOS), Bentonville, Arkansas, June 5 - 8, 2016.
- Statistics and Applied Mathematics Seminar, Department of Mathematics and Statistics, University of South Alabama, Mobile AL, November 9, 2015.
- Invited talk, Departmental Colloquia, Department of Mathematical Science, Georgia Southern University, October 9, 2015.
- The 4<sup>nd</sup> Workshop on Biostatistics and Bioinformatics, Georgia State University, Georgia, May 8 - 10, 2015.

- Joint Mathematics Meeting, San Antonio, TX, January 10 - 13, 2015.
- Invited talk, Departmental Colloquia, Department of Mathematical Science, Georgia Southern University, October 17, 2014.
- Beyond Bioinformatics Opening Workshop at SAMSI, NC Biotechnology Center, North Carolina, September 8 – 12, 2014.
- The South Regional Council of Statistics (SRCOS), Galveston, TX, June 1 - 4, 2014.
- The 3<sup>rd</sup> Workshop on Biostatistics and Bioinformatics, Georgia State University, Georgia, May 9 - 11, 2014.
- Joint Mathematics Meeting, Baltimore, MD, January 15 - 18, 2014.
- The Opening Workshop on Computational Methods in Social Sciences at SAMSI, Radisson Hotel Research Triangle Park, North Carolina, August 18 - 22, 2013.
- Joint Statistical Meetings, Montreal, Quebec, Canada, August 4 - 8, 2013.
- NISS/ASA Writing Workshop for Junior Researchers, Montreal, Quebec, Canada, August 4, 7, 2013.
- The South Regional Council of Statistics (SRCOS), Montgomery Bell Park, TN, June 2 - 5, 2013.
- The Transition Workshop on Massive Datasets at SAMSI, Radisson Hotel Research Triangle Park, North Carolina, May 19 - 22, 2013.
- The 2<sup>nd</sup> Workshop on Biostatistics and Bioinformatics, Georgia State University, Georgia, May 10 - 12, 2013.
- The 2013 Florida Chapter of the American Statistical Association Annual Meeting, February 8, 2013.
- Departmental Colloquia, Department of Mathematics and Statistics, University of South Alabama, Mobile AL, October 25, 2012.
- Math-biology and Statistics Seminar, Department of Mathematics and Statistics, University of South Alabama, Mobile AL, September 21, 2012.
- Poster Presentation at the the 8th International Perdue Symposium on Statistics, Perdue University, Indiana, June 20 to June 24, 2012.
- Poster Presentation at the South Regional Council of Statistics, Jekyll Island, Georgia, June 3 to June 6, 2012.
- Graduate Student Council, Auburn University, February 29, 2012
- Joint Mathematics Meetings, Boston, MA, January 4 - 7, 2012.
- Joint Statistical Meetings, Miami Beach, Florida, July 30-August 4, 2011.
- February Fourier Talks 2011, University of Maryland, College Park, Maryland, February, 2011

### **Honors, Awards and Pending Grants**

- Micheal H. Kutner Junior Faculty Poster Award, Southern Regional Council on Statistics, 2017.

- Travel Grant for Junior Faculty and Isolated Statisticians, Georgia State University, 2017.
- Travel Grant for Junior Faculty and Isolated Statisticians, Southern Regional Council on Statistics, 2016.
- Arts & Sciences Summer Professional and Development Award, University of South Alabama, 2014-2015.
- Travel Grant for Junior Faculty and Isolated Statisticians, Southern Regional Council on Statistics, 2014.
- Arts & Sciences Support and Development Award, University of South Alabama, 2013-2014.
- Travel Grant for Junior Faculty and Isolated Statisticians, Southern Regional Council on Statistics, 2013.
- SSPA Conference Grant, Joint Statistics Meeting (JSM), 2013.
- Boyd Harshbarger Student Travel Award, Southern Regional Council on Statistics, 2012.
- R. L. Anderson Student Best Poster Award, Southern Regional Council on Statistics, 2012.Member
- International Outstanding Student Award, Auburn University, 2012
- Graduate Student Travel Grant, Joint Mathematics Meetings, Boston, MA, January 4 - 7, 2012.
- Excellence in Research, Dept. of Mathematics & Statistics, Auburn University, 2011
- COSAM Student Travel Award, Summer 2011.
- Boyd Harshbarger Student Travel Award, Southern Regional Council on Statistics, 2010.
- R. L. Anderson Student Best Poster Award, Southern Regional Council on Statistics, 2010.
- Ph.D. Scholarship, Italian Government, University of Rome II, Torvergata, Rome, Italy, 2007-2008.
- ICTP scholarship, UNESCO, Trieste, Italy, 2006-2007.

### **Current and Past Professional Affiliations**

- Member of the IISA (International Indian Statistical Association)
- Member of the ASA (American Statistical Association)
- Member of the AMS (American Mathematical Society)
- Member of the ENAR (Eastern North American Region/International Biometric Society)

### **Skills**

- Spoken Languages: English, French.
- Statistical Computing: SAS, R, SPSS, MINITAB.