

## CURRICULUM VITAE

### 1. PERSONAL INFORMATION

NAME: TITUS KITHANZE KIBUA

NATIONALITY: KENYAN

ADDRESS: KENYATTA UNIVERSITY  
MATHEMATICS AND ACTUARIAL SCIENCE  
DEPARTMENT  
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GENDER: MALE

### 2. ACADEMIC QUALIFICATIONS

1992 – 1995    University:        City University, London.  
                         Degree:                Doctor of Philosophy degree (Statistics)  
                         Thesis Title:        Variance Function Estimation.

1983 – 1985    University:        University of Nairobi.  
                         Degree:                Master of Science degree (Mathematical Statistics)  
                         Courses:              Probability and Stochastic Processes I  
                                                      Statistical Inference I  
                                                      Design and Analysis of Experiments I & II  
                                                      Multivariate Statistics Analysis  
                                                      Project in Mathematical Statistics  
                         Project Title:        Improved Estimation on Regression  
                                                      Analysis

1979 – 1983    University:        University of Nairobi.  
                         Degree:                Bachelor of Education (Science)  
                                                      2<sup>nd</sup> class (Hons) Upper division.  
                         Statistics Courses:    Probability and Statistics I,  
                                                      Probability & Statistics II, Statistics I,  
                                                      Statistics II, Tests of Hypothesis, Design of  
                                                      Experiments, Operations Research I, Quality  
                                                      Control, Sample Surveys, Time Series, Non –  
                                                      Parametric Methods.

Mathematics Courses: Calculus I, Calculus II, Algebra I, Linear Algebra I, Linear Algebra II, Abstract Algebra I, Abstract Algebra II, Analysis, Real Analysis I, Real Analysis II, Applied Vector Theory, Classical Mechanics I, Ordinary Differential Equations, Numerical Analysis I, Methods II, Complex Analysis, Analytic Mechanics.

Education Courses: General Psychology, Educational Foundations, Curriculum Development, General Methods, Subject Methods, Educational Psychology, Educational Administration

### 3. WORK EXPERIENCE

2011 – present:	Kenyatta University.
Designation:	Senior Lecturer (Statistics)
Responsibilities:	Teach both undergraduate and postgraduate statistics courses. Guide, Supervise and examine postgraduate research work leading to dissertation writing. Supervise teaching practice for students training to become secondary school teachers. Design and implement courses that suit specific industrial and other market needs. Participate in the evaluation of the teaching activities, curriculum etc in the department. Liaise with other departments and individuals who collaborate with Mathematics and actuarial science department. Academic advisor for individual students in the department of Mathematics and actuarial science.
1991 – 2010	Kenyatta University.
Designation:	Lecturer (Statistics)
Dec. 1988 – 1990	Kenyatta University.
Designation:	Tutorial Fellow (Statistics)
Sept. 1988 – Dec. 1988	Kenyatta University.
Designation:	Part – Time Lecturer (Statistics)
1985 – 1988	Kenya Polytechnic (Present Technical University of Kenya).
Designation:	Lecturer, Department of

Mathematics/Statistics/Computing.

1983 – 1985 Teachers service commission (T.S.C)  
Designation: Graduate teacher

#### **4. ADMINISTRATIVE RESPONSIBILITIES**

08/02/2018 – 26/09/2018	Chairman, Statistics and Actuarial Science Department
06/09/2018 – 11/09/2018	Acting dean, School of Pure and Applied Sciences
12/06/2017 – 31/07/2017	Acting chairman, Statistics and Actuarial Science Department
23/01/2017 – 27/01/2017	Acting chairman, Statistics and Actuarial Science Department
13/06/2016 – 12/08/2016	Acting chairman, Statistics and Actuarial Science Department
17/02/2016 – 08/03/2016	Acting chairman, Statistics and Actuarial Science Department
17/08/2015 – 25/09/2015	Acting chairman, Statistics and Actuarial Science Department
23/07/2014 – 25/07/2014	Acting chairman, Statistics and Actuarial Science Department
26/11/2012 – 2/12/2012	Acting chairman, Mathematics Department
13/07/2012 – 18/07/2012	Acting chairman, Mathematics Department
19/12/2011 – 18/01/2012	Acting chairman, Mathematics Department
2011	Member of school board of undergraduate students
2009	Departmental coordinator University WEB.
2006 – 2011	Departmental coordinator E – learning.
1999 – 2011	Member of departmental curriculum committee
1999 – 2011	Academic advisor undergraduate students
1997 – 1998	African Virtual University facilitator.
1998 – 2000	Area supervisor – teaching practice.

Duties: Posting student teachers to various secondary schools for teaching practice. Coordinating the whole teaching practice exercise including liaising with the head teachers of the concerned schools and other teachers in those schools. Provide linkage between the student

teachers and the University. Assign duties to other supervisors.

## **5. POSTGRADUATE SUPERVISION**

- (a) M.Sc. supervision completed - 11
- (b) M.Sc. supervision ongoing - 3
- (c) Supervision - other Universities  
M.Sc. Completed (Kisii University) - 1
- (d) Projects/Thesis Examination
  - (i) PH.D (2)
  - (ii) M.Sc. (Always)
  - (iii) Other Universities (1)

## **6. CONFERENCES/SEMINARS/WORKSHOPS**

2011

First Kenyatta University International Mathematics conference, 2011, Kenyatta University conference Centre, Nairobi, Kenya, June 8 – 10, 2011.

2010

Transnational Teaching, Australian Studies Institute (AUSI), Nairobi, in conjunction with Edith Cowan University (ECU) on 12<sup>th</sup> November 2010.

2010

Effective Teaching Skills, Australian Studies Institute (AUSI), Nairobi, in conjunction with Edith Cowan University (ECU), 19<sup>th</sup> - 20<sup>th</sup> July 2010.

2009

Kenyatta University, Mathematics Department data analysis conference, 26<sup>th</sup> August – 4<sup>th</sup> September 2009, students computer Center.

2008

1<sup>st</sup> regional conference e – Learning 2008. 18<sup>th</sup> – 20<sup>th</sup> November 2008, Kenyatta University Science Complex 02.

2005

Volume II report on poverty and inequality, Ministry of Planning and National Development. 1<sup>st</sup> November 2005, New Stanley hotel Nairobi, Kenya.

1996

Curriculum Review, Department of Mathematics, Kakamega Golf Hotel.  
December, 1996.

1995

Postgraduate seminar for Ph.D. students in the United Kingdom Universities,  
Oxford University.

1992 – 1995

All postgraduate seminars, City University, London.

1993

Postgraduate seminar for PhD students in the United Kingdom  
Universities, Lancaster University.

## **7. RESEARCH AND PUBLICATIONS**

F. K. Samuel and T. K. Kibua (2019): Seasonal autoregressive integrated moving average model for tax revenue forecast in Kenya. *European international journal of science and technology* 8(6), 11 – 30.

Titus K. Kibua and Cornelius M. Ndunda (2018): Aggregate association index for analyzing the association between two dichotomous variables with missing information. *International Journal for Innovative Research in Multidisciplinary Field*, vol. 4, issue 1, 16 – 21.

Titus K. Kibua (2017): Parametric approach to estimate variance functions. *International Journal for Innovative Research in Multidisciplinary Field*, vol. 3, issue 11, 11 – 21.

Titus K. Kibua (2017): Estimation of variance in heteroscedastic data. *International Journal for Innovative Research in Multidisciplinary Field*, vol. 3, issue 10, 59 – 65.

Titus K. Kibua and Henry K. Chepkwony (2017): Determinants of secondary school students' engagement in sports activities. *International Journal for Innovative Research in Multidisciplinary Field*, vol. 3, issue 9, 117 – 122.

Kihumba, E. N., Kibua, T., Obala, A. (2017): Evaluation of HIV/AIDS treatment in Uasin Gishu county, Kenya.

*International Journal of Modern Science and Technology*, vol. 2, issue 4, 131 – 137.

Mackenzie, M. E., Kibua, T., Tinenga, R. (2015): Use of contingency tables to investigate the association of gender, type of primary school, KCPE results and KCSE results in Mathematics. *The international Journal of Humanities and social studies*, vol. 3, issue 12, 280 – 286.

Omwonyo, B. O. A., Kibua, T., Ayugi, S. (2015): Use of logistic regression analysis to determine significant factors that affect contraceptive use among teenagers in Yala and Luanda towns, in Kenya. *International journal of novel research in healthcare and nursing*, vol. 2, issue 1, 10 – 17.

T.K.Kibua and M.Karuku (2006): Bandwidth selection in smoothing functions. *East african journal of statistics volume1 number 2*, 161 – 174.

T.K.Kibua and M.Karuku (2006): Some results on nonparametric estimation of variance function. *East african journal of physical sciences*, 7(1/2), 51 – 64.

T.K.Kibua, (2005): Some asymptotic theory for variance function smoothing. *East african journal of statistics 1*, 9 – 22.

## **8. PROJECT/RESEARCH GRANTS**

1992 – 1995                      British Council scholarship award.

## **9. NATIONAL AND INTERNATIONAL RECOGNITION**

2010:                              Invited as a special guest to the Australian Studies Institute 10<sup>th</sup> anniversary celebration luncheon and graduation ceremony.

1991 – 2000:                      Examiner (Business Statistics), Kenya National Examinations Council.

Duties:                              Chair moderation panels.  
Set, moderate and mark examination papers.

## **10. ACADEMIC LEADERSHIP**

Member of a committee that initiated the following new academic programmes in my area of specialization in the department

- (i) Master of Science in Social Statistics.
- (ii) Master of Science in Biostatistics.
- (iii) Bachelor of Science in Statistics and Programming.
- (iv) SMA 367 Explanatory Data Analysis. A new unit introduced into an existing programme.

## **11. COLLABORATION WITH OTHER UNIVERSITIES**

- 2000 – 2014: External examiner (Business Statistics),  
Australian Studies Institute (AUSI)
- 2010 – 2011: External examiner (Quantitative Methods),  
Kenya School of Monetary Studies (KSMS)
- 2008 – 2015: Moderation (Business Mathematics),  
United States International University (USIU)

## **12. COMMUNITY WORK**

Member: Kenya National Statistical Society.

## **13. REFERENCES**

1. Dr. Bernard Muthiani Kivunge  
Kenyatta University  
Mathematics and Actuarial Science Department  
Cell phone: 0724611844  
E – Mail: [kivunge.bernard@ku.ac.ke](mailto:kivunge.bernard@ku.ac.ke)
2. Professor David Mumo Malonza  
South Eastern Kenya University  
Cell phone: 0723911638
3. Professor Francis Kimani Gatheri  
Technical University of Kenya  
Cell phone: 0722238082  
E – Mail: [fgatheri@tukenya.ac.ke](mailto:fgatheri@tukenya.ac.ke)