

## Professional Profile

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‘Qualified Statistician with a proven track record in carrying out consultancy on customer satisfaction surveys, statistical data analysis and teaching undergraduate and postgraduate statistics courses at the university’

With over seven years teaching experience at the university, I am highly organized, efficient, personable and able to deliver consistently high results in challenging and pressurised work environments. Well versed in the development of learning and teaching materials for statistics courses including the use of statistical packages.

### Core Skills

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- Experienced Statistics Teacher
- Statistical analysis using Excel
- Fast Learner
- Proficient user of RGUI
- Latex Typesetting
- Statistical Surveys

## Education and Qualifications

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**Ph.D., Mathematical Statistics**, University of Nairobi, 2017

Concentrations: Mixed Distributions

Thesis: Four Routes to Mixed Poisson Distributions.

**M.Sc., Mathematical Statistics**, University of Nairobi, 2012

Concentrations: Mixed distributions

Project: On the Construction of Mixed Poisson Distributions

**B.Sc., Statistics**, University of Nairobi, 2010

First Class Honours

## Career Summary

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**August 2018 - Present**                      **School of Mathematics, University of Nairobi**

**Lecturer**

### *Outline*

Carrying out teaching and support and engaging in research and publication of academic journal papers among other responsibilities as assigned by my supervisor.

### *Key Responsibilities*

- Teaching at Postgraduate level.

- Supervision of postgraduate student projects.
- Participating in student mentorship
- Research
- Consultancy

**November 2014 – August 2018                      School of Mathematics, University of Nairobi**  
**Tutorial Fellow**

*Outline*

Carrying out teaching and support and engaging in research and publication of academic journal papers among other responsibilities as assigned by my supervisor.

*Key Responsibilities*

- Teaching Design and Analysis of Experiments at Postgraduate level.
- Teaching undergraduate statistics courses: Time series Analysis, Sample Survey Theory and Methods, Theory of Estimation, Probability and Statistics, among others.
- Participating in student mentorship
- Research
- Consultancy

*Key Achievement/Projects*

- Supervised one postgraduate student in Social statistics project.

**September 2011 – November 2014                      School of Mathematics, University of Nairobi**  
**Graduate Assistant**

*Outline*

Carrying out instructional responsibilities and engaging in academic research.

*Key Responsibilities*

- Teaching undergraduate Statistics courses
- Supervision of undergraduate statistics projects
- Processing of University Examinations for the School of Mathematics
- Participation in the School of Mathematics exhibition committee and preparation of marketing materials and presentations.

*Key Achievement/Projects*

- **Project Title:** Customer Satisfaction Survey. **Client:** College of Biological and Physical Sciences, University of Nairobi. **Team Leader:** Professor Moses Manene (Statistician). **Team members:** Ms. Rachel Jelagat Sarguta (Statistician), **Dates:** May-June, 2013. **Venue:** Nairobi, Kenya.
- **Project Title:** Customer Satisfaction Survey. **Client:** College of Biological and Physical Sciences, University of Nairobi. **Team Leader:** Professor Moses Manene (Statistician). **Team members:**

## Publications and Thesis

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**Sarguta, R.** “**Four Routes to Mixed Poisson Distributions**”, PhD Thesis, University of Nairobi, September 2017.

**Sarguta, R.** and Ottieno, J. A. M. (2014) **Recursive Route to Mixed Poisson distributions using Integration by Parts.** *Mathematical Theory and Modeling*, Vol. 4, No. 14, 144-155

**Sarguta, R.** and Ottieno, J. A. M. (2015) **Mixed Poisson Distributions in terms of Special Functions** *Mathematical Theory and Modeling*, Vol. 5, No. 6, 245-274

**Sarguta, R.** “**On the Construction of Mixed Poisson Distributions**”, Masters Thesis, University of Nairobi, August 2012.

## Professional Training, Conferences and Workshops

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- Attended the 3<sup>rd</sup> International Science Program (ISP) and SIDA network meeting from 20<sup>th</sup> to 24<sup>th</sup> August, 2018, in Entebbe, Uganda. The main focus of the meeting was to bring researchers together to form sustainable research groups.
- Successfully completed a training course on: **Biostatistical models for joint longitudinal and survival data in medical research: Theory and Applications in R software** held from 6<sup>th</sup> to 10<sup>th</sup> August 2018 in the School of Mathematics, University of Nairobi.
- Successfully trained on **PhD Supervision** on 19<sup>th</sup> June 2018 at the School of Mathematics, University of Nairobi.
- Successfully completed a practical training on: **Open Data Kit Short Course**, held from 7<sup>th</sup> to 10<sup>th</sup> March, 2018 in the School of Mathematics, University of Nairobi.
- Successfully completed a practical training on: **Introduction to Survival Analysis using R: Theory and Practice**, held from 15<sup>th</sup> to 19<sup>th</sup> January, 2018, at School of Mathematics, University of Nairobi.
- **Grant Proposal Writing** Training, UNES, University of Nairobi, 27<sup>th</sup> to 29<sup>th</sup> September 2017.
- The 4<sup>th</sup> Strathmore International Mathematics Conference, 19<sup>th</sup> to 23<sup>rd</sup> June 2017, Strathmore University – Nairobi, Kenya. Theme: Enhancing Collaborative Research in Mathematical Science.
- The first East African Conference on Mathematical Statistics, 14<sup>th</sup> to 16<sup>th</sup> June 2017, Kigali Conference and Exhibition Village - Kigali, Rwanda. Theme: Re-branding Research for Sustainable Development.

Title of the paper presented: “**Four Routes to Mixed Poisson Distributions**”.

- The 3<sup>rd</sup> EAUMP Conference on Advances in Mathematics and its Applications, 26<sup>th</sup> to 28<sup>th</sup> October 2016, Makerere University, Kampala – Uganda.  
Title of the paper presented: “**Mixed Poisson Distributions in Explicit Form and their Properties**”.
- Successfully completed a training course on: **Systematic Reviews and Meta-Analysis, Mixed Methods Research and Monitoring & Evaluation** held on 20<sup>th</sup> to 23<sup>rd</sup> July 2016 in the School of Mathematics.
- Successfully completed a practical training on **R-GUI and STATA** held on 6<sup>th</sup> to 9<sup>th</sup> July 2016 in the School of Mathematics.
- Successfully completed a three-month training on **Mathematical Computational Methods**, 28<sup>th</sup> August 2013 to 25<sup>th</sup> November 2013, Lappeenranta University of Technology, Lappeenranta-Finland.
- **Pedagogy training**, University of Nairobi, June 2012

## Positions of Responsibility

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- Coordinator of School of Mathematics (SOM) Examinations and Registrations Committee
- Active member of SOM Finance and Appropriation Committee
- Active member of SOM Exhibition and Show Committee
- Active member of SOM Brochure/ Annual Report/ Publications committee

## Funding and Academic Awards

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- Funded by EAUMP to attend the 3<sup>rd</sup> ISP – SIDA network meeting held in August 2018 in Entebbe, Uganda.
- Funded by DELTAS program to attend the 1<sup>st</sup> African Conference on Mathematical Statistics held in June 2017 in Kigali, Rwanda.
- Funded by International Science Programme (ISP) to attend the 3<sup>rd</sup> EAUMP conference held in October 2016 in Makerere University, Kampala.
- Received fee waiver for PhD studies from the University of Nairobi in 2015
- Funded by the North-South-South, Higher Education Institution Network Programme for a three-month exchange programme in Lappeenranta University of Technology, Finland, in August 2013.
- Awarded University of Nairobi Masters Scholarship in October 2010.