Biography and List of Publications

Katleho Makatjane (Dr)

May 10, 2021

Biography

Katleho Makatjane (Dr) is an experienced quantitative Business and Risk Analyst Consultant and a proficient researcher. He is a member of several Professional associations.

1. **An ordinary member of South African Statistical association (SASA)**. South African Statistical Association foster the study and knowledge of statistical theory and its application towards improving the quality of life of all South Africans. The association creates a forum for nurturing, attracting and retaining statisticians in South Africa, and advancing their interests. It also market the discipline of statistics in order to improve the general perception and appreciation of the discipline to support members by providing a platform for networking opportunities and publications to produce timely and high quality up-to-date publications, including the South African Statistical Journal (SA Statist J) and the Conference Proceedings, and communicate to its members relevant information and news through the Newsletter.

2. **Chartered Member of Institute of Certificated and Chartered Statisticians of South Africa(ICCSSA)**. ICCSSA promote the importance and public understanding of statistics in organisations. It also promote professionalism in the field of statistic and finally encourage collaboration between practising statisticians and accredit members and statistics courses.

3. **Full member of Society of Risk Analysis (SRA).** SRA is a multidisciplinary, interdisciplinary, scholarly, international society that provides an open forum for all those who are interested in risk analysis with 16 Risk Analysis Speciality Groups.

4. **Full Member of South African Monitoring and Evaluation association (SAMEA).** SAMEA strives to cultivate a vibrant community that will support, guide and strengthen the development of monitoring and evaluation (M&E) as an important discipline, profession and instrument for empowerment and accountability in South Africa.

Dr Makatjane specializes in predictive modelling; big data, data mining (i.e Text mining and Text analysis), quantitative business and risk analysis, social media and digital tools with social network analysis using R; economic; individual and group cognition. This makes me to possess specialist pedigree in the areas of quantitative and qualitative business and risk analysis, data mining, statistical modelling and model validations, risk mitigation plan development, actuarial and market related data.

List Of Publications

1. Makatjane K & Moroke N (2021). Predicting Extreme Daily Regime Shifts in Financial Time Series Exchange/Johannesburg Stock Exchange-All Share Index. International Journal of Financial Studies 9(2) 1-18. https://doi.org/10.3390/ijfs9020018

2. Molefe EK & Makatjane KD (2020) Roads transport infrastructure and trade facilitation in South Africa: the Monte-Carlo simulation approach. Eurasian journal of Economics and Finance 8(3),p 130-139. https://eurasianpublications.com/Eurasian-Journal-of-Economics-and-Finance/Vol.8-No.3-2020.aspx.

3. Van Wyk RB, van Wyk BF & Makatjane KD (2020). Trends in foreign agricultural trade and its impact on households in South Africa, Outlook on Agriculture 1 (8) p 1-8. https://doi.org/10

4. Makatjane KD & Molefe EK(2020) Predicting Regime Shifts in Johannesburg Stock Exchange All-Share Index (JSE-ALSI): A Markov-Switching Approach. Eurasian journal of Economics and Finance 8 (2) 95-108. https://eurasianpublications.com/Eurasian-Journal-of-Economics-and-Finance/Vol-8-No.2-2020/EJEF%20-%204.pdf.

5. Makatjane KD & Kalebe K (2018). Modelling Conditional volatility of saving rate by a time varying parameter model, International Journal of Economics and Management Engineering. 12 (09) 1170-1173. https://publications.waset.org/10009468/modelling-conditional-volatility-of-saving-rate-by-a-time-varying-parameter-mode.

6. Makatjane KD, Moroke ND & Xaba LD (2018), On the Prediction of Inflation Crises of South Africa using Markov-switching Bayesian Vector Autoregressive and Logistic Regression Models. Journal of Social Economics Research 5 (1) p 10-28. https://EconPapers.repec.org/RePEc:p 28.

7. Makatjane KD Molefe KE & Van Wyk, RB(2018) The Analysis of the 2008 Financial Crisis: An Intervention Approach. Journal of Economics and Behavioural Studies 10 (1) p 59-68. https://ojs.amhinternational.com/index.php/jebs/article/view/2089.

8. Makatjane KD, Xaba LD & Moroke ND(2017) Application of Generalised Autoregressive Score model to Stock Returns, International Journal of Economics and Management Engineering 11(11) p 2714-2717. https://publications.waset.org/10008199/application-of-generalized-autoregressive-score-model-to-stock-returns.

9. Makatjane KD, Moroke ND & Xaba LD (2017) Threshold Cointegration and Nonlinear Causality Test Between Inflation Rate and Repo Rate, Journal of Economics and Behavioural studies 9(3), p 163-170. https://ojs.amhinternational.com/index.php/jebs/article/view/1755.

10. Makatjane KD & Makatjane TJ (2016) Factors That Influence Academic Performance of First Year Students at The National University of Lesotho: Structural Equation Modelling Approach, International Journal of Statistics and Applied Mathematics 2 (1) p42-49. http://www.r 4-14-995.pdf.

11. Makatjane KD & Xaba D (2016) An Early Warning System for Inflation Using Markov-Switching and Logistic Models Approach. Risk Governance & control: Financial markets & institutions 6 (4) p 30-39. http://www.virtusinterpress.org/IMG/pdf/RGC_Volume__6_Issu

12. Makatjane KD & Moroke ND (2016) Comparative Study of Holt- Winters Triple Exponential Smoothing and Seasonal ARIMA: Forecasting Short-Term Seasonal Car Sales in South Africa. Risk Governance & control: Financial markets & institutions 6 (1) p, 64-80. https://virtusinterpress.org/IMG/pdf/10-22495_rgcv6i1art8.pdf.

Conference Proceedings

1. Makatjane K, Moroke ND & Ncube BA (2020). Detecting Financial Fraud in South Africa: A Comparison of Logistic Model Tree and Gradient Boosting Decision Tree. In 36th IBIMA conference proceedings. https://ibima.org/accepted-paper/detecting-financial-fraud-in-south-afric a-comparison-of-logistic-model-tree-and-gradient-boosting-decision-tree/.

2. Makatjane KD, Moroke ND & Ncube BA (2019). Modelling extreme Co-movement between oil prices and economic growth, Annual Proceedings of the South African Statistical Association Conference. Volume 2019 Number Congress 1 p25-32. https://journals.co.za/content/journ 19eaa98ae8.

3. Makatjane KD & Moroke ND (2018) Application of Multivariate Generalised Autoregressive Score Model on JSE and SSE All Share Index: A Copula Approach. Annual Proceedings of the South African Statistical Association Conference Volume 2018 Number Congress 1 p 25-31. https://hdl.handle.net/10520/EJC-129888b35c.

Book Chapter(s) and Working Paper(s)

1. Makatjane KD; Moroke ND & Munapo E (2020) Predicting the tail behaviour of financial time series exchange / Johannesburg stock exchange closing banking indices: Extreme value theory approach. Handbook of Research and Emerging Theories, Models and Applications of Financial Econometrics. 31–64. https://doi.org/10.1007/978-3-030-54108-8_2.

2. Makatjane K & Van Wyk R (2020) Identifying structural changes in the exchange rates of South Africa as a regime-switching process (No wp 202-162) World Institute for Development Economic Research (UNU-WIDER).https://doi.org/10.35188/UNU-WIDER/2020/919-8.

Accepted Paper(s)

- Makatjane KD (2021) Bootstrapping Uncertainty Intervals for Return Periods of Extreme Monthly Electricity Consumption. This paper has been accepted for publication in International Journal of Energy Economics and Policy.

Work In Progress

- Modelling Stochastic Parameters of the Generalised Autoregressive Score Model as Regime Shifts. This paper is to be presented in 31^{st} European Conference on Operational Research on 11–14 July 2021 at University of West Africa.