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Google Scholar scholar.google.com/citations?user=zXWyRoQAAAAJ&hl=en · Profile scholar.ucc.edu.gh/staff/d9bddd71-ae2-4f2e-a91b-e9c9b715258e

RESEARCH

Interests Statistics

Areas Statistics and Probability · Management Science and Operations Research · Economics and Econometrics · Statistics, Probability and Uncertainty · Applied Mathematics · Artificial Intelligence

RESEARCH SUMMARY

32	123	7	6	0.37	0%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 32 publications listed below, 1999–2026. Field-weighted impact is the mean over the 15 works scored for it; 1.00 is the world average for works of the same field, type and year. 0 of the 15 papers scored for it are among the world's most cited tenth for their field, type and year.

PUBLICATIONS

Journal articles 25

1. David Kwamena Mensah, Emmanuel Kojo Amoah, Nathaniel Howard (2026). Statistical Methods for Consolidated Fire Outbreak Data Extraction in Ghana. *Engineering Reports*. <https://doi.org/10.1002/eng2.70895>
2. Nathaniel Howard, David Kwamena Mensah (2024). LINEAR MODEL IN THE PRESENCE OF MULTICOLLINEAR PREDICTORS AND AUTOCORRELATED ERRORS: INSIGHTS FROM REGULARIZED AND ROBUST REGRESSION METHODS. *Journal of Data Acquisition and Processing*. <https://scholar.google.com/scholar?cluster=17345525504653793278&hl=en&oi=scholar>
3. Jones Asante Manu, Nathaniel Howard, Bismark Kwao Nkansah (2024). Quartic Transmuted Exponential Distribution: Characteristics and Parameter Estimation. *International Journal of Statistical Distributions and Applications*. <https://doi.org/10.11648/j.ijstd.20241002.13>
4. Nathaniel Howard (2024). Statistical approach to enhancing performance of logistic regression model: Application to HIV/AIDS data. *International Journal of Research and Innovation in Applied Science*. https://www.academia.edu/download/113552566/Statistical_Approach_to_Enhancing_Performance_of_Logistic_Regression_Model_Application_to_HIVAIDS_Data.pdf
5. Mustapha Adams, Nathaniel Howard, Ishaque Mahama (2022). Long-term Predictors of Stroke Severity among Patients on Secondary Prevention in Northern Ghana. *Asian Research Journal of Mathematics*. <https://doi.org/10.9734/arjom/2022/v18i12627>
6. Nathaniel Howard, Mustapha Adams (2022). Multi-State analysis of secondary prevention of stroke in Northern Ghana. *International Journal of Statistics and Applied Mathematics*. <https://doi.org/10.22271/math.2022.v7.i6b.911>
7. David Kwamena Mensah, Michael Arthur Ofori, Nathaniel Howard (2022). Traumatic Systolic Blood Pressure Modeling: A Spectral Gaussian Process Regression Approach with Robust Sample Covariates. *Mathematics and Statistics*. <https://doi.org/10.13189/ms.2022.100312>
8. Michael J. Adjabui, Jakperik Diogban, Nathaniel K. Howard (2021). Stepwise Procedure for Toxicological Assessment Based on Ratio of Mean Differences for a Normally Distributed Data. *Asian Research Journal*

of Mathematics. <https://doi.org/10.9734/arjom/2021/v17i1130341>

9. NK Howard (2020). A Markov-modulated tree-based gradient boosting model for auto-insurance risk premium pricing. *Risk and Decision Analysis*.
10. Ernest Kofi Davis, Wee Tiong Seah, Nathaniel Howard, Eric Magnus Wilmot (2020). The attributes of mathematics learning which Ghanaian senior high school students value. *Journal of Global Education and Research*. <https://doi.org/10.5038/2577-509x.5.1.1096>
11. Michael J. Adjabui, Nathaniel K. Howard, Mathias Akamba (2019). Biostatistical Assessment of Mutagenicity Studies: A Stepwise Confidence Procedure. *Journal of Probability and Statistics*. <https://doi.org/10.1155/2019/3249097>
12. B. K. Nkansah, Arimiyaw Zakaria, Nathaniel Howard (2019). Effect of measurement scales on results of item response theory models and multivariate statistical techniques. *Journal of Informatics and Mathematical Sciences*. <https://doi.org/10.26713/jims.v11i1.951>
13. Carl Hope Korkpoe, Nathaniel Howard (2019). Volatility Model Choice for Sub-Saharan Frontier Equity Markets - A Markov Regime Switching Bayesian Approach. *EMAJ Emerging Markets Journal*. <https://doi.org/10.5195/emaj.2019.172>
14. Dennis Arku, Kwabena Doku-Amponsah, Nathaniel K. Howard (2018). A Markov-modulated tree-based gradient boosting model for auto-insurance risk premium pricing. *Risk and Decision Analysis*. <https://doi.org/10.3233/rda-180050>
15. HOWARD NATHANIEL (2018). FLEXIBLE STATISTICAL MODELLING OF THE OCCURRENCES OF TRANSCRIPTION FACTOR BINDING SITES ALONG A DNA SEQUENCE. *ADVANCES AND APPLICATIONS IN STATISTICS*. https://www.researchgate.net/profile/Gabriel-Kallah-Dagadu/publication/329627392_FLEXIBLE_STATISTICAL_MODELLING_OF_THE_OCCURRENCES_OF_TRANSCRIPTION_FACTOR_BINDING_SITES_ALONG_A_DNA_SEQUENCE/links/5c18ccd84585157ac1ca541e/FLEXIBLE-STATISTICAL-MODELLING-OF-THE-OCCURRENCES-OF-TRANSCRIPTION-FACTOR-BINDING-SITES-ALONG-A-DNA-SEQUENCE.pdf
16. HOWARD NATHANIEL (2018). Modelling age at first marriage among Ghanaians in Urban Southern Ghana. *Math Theory Model*. <https://ir.ucc.edu.gh/server/api/core/bitstreams/587b92b0-564a-4e48-94c1-6582afee1cde/content>
17. HOWARD NATHANIEL (2018). On the exponential power distribution. *Journal of Mathematical Theory and Modeling*. <https://scholar.google.com/scholar?cluster=16019996027164048035&hl=en&oi=scholar>
18. HOWARD NATHANIEL (2018). Probabilistic graphical modelling of causal effects among the occurrences of transcription factors in DNA sequence. *JP JOURNAL OF BIOSTATISTICS*. <https://ir.ucc.edu.gh/server/api/core/bitstreams/924dff0e-0f20-4786-be99-5109353ba168/content>
19. Michael Adjabui, Nathaniel Howard, Albert Luguterah (2017). Nonparametric Stepwise Procedure for Identification of Maximum Safe Dose (MSD). *Asian Research Journal of Mathematics*. <https://doi.org/10.9734/arjom/2017/36377>
20. HOWARD NATHANIEL (2016). Nonparametric Stepwise Procedure for Identification of Minimum Effective Dose (MED). *International Journal of Statistics and Systems*. <https://scholar.google.com/scholar?cluster=4202750021582237763&hl=en&oi=scholar>
21. HOWARD NATHANIEL (2014). On the Detection of Influential Outliers in Linear Regression Analysis. *American Journal of Theoretical and Applied Statistics*. <https://doi.org/10.11648/j.ajtas.20140304.14>
22. NK Howard (2006). A guide to questionnaire surveys. *Mathematics Group Cape Coast, Ghana*. <https://scholar.google.com/scholar?cluster=12169218773073213900&hl=en&oi=scholar>
23. Nathaniel K Howard (2006). Introduction to statistical methods. *Ghana Mathematics Group*. <https://scholar.google.com/scholar?cluster=18414032078316926640&hl=en&oi=scholar>
24. HOWARD NATHANIEL (2000). Elements of statistical analysis. Accra, Ghana: The Printers. <https://scholar.google.com/scholar?cluster=7943993786185380958&hl=en&oi=scholar>
25. NK Howard (1999). Who is heavy and who is light? *Journal of Natural Sciences*. <https://www.africabib.org/rec.php?RID=Q00034508>

Conference papers 2

1. Irene Kafui Vorsah Amponsah, Henry De-Graft Acquah, Nathaniel Howard (2019). A Monte Carlo Comparison of rMDL, gMDL, eMDL, nMDL, AIC and BIC Under the Effect of Stochastic Variance for Asymmetric Price Transmission Linear Models. <https://doi.org/10.1109/icmrsisiit46373.2020.9405933>
2. Irene Kafui Vorsah Amponsah, Henry De-Graft Acquah, Nathaniel Kwamena Howard (2019). Comparative Evaluation of Asymmetric Price Transmission Linear Models Using rMDL, eMDL, nMDL, gMDL, AIC and BIC Across Varying Sample Sizes. <https://doi.org/10.1109/iccma.2019.00030>

Reports 4

1. HOWARD NATHANIEL (2016). Introduction to Probability Theory. *Ghana Universities Press. P. O. Box.*
2. HOWARD NATHANIEL (2008). Black Star Series: Core Mathematics for Senior High Schools Book 1. *Cambridge University Press.*
3. HOWARD NATHANIEL (2008). Black Star Series: Core Mathematics for Senior High Schools Book 2. *Cambridge University Press.*
4. HOWARD NATHANIEL (2008). Black Star Series: Core Mathematics for Senior High Schools Books 3 & 4. *Cambridge University Press.*

Theses 1

1. N. K. Howard (2005). Multiscale Analysis of Landscape data sets from Northern Ghana: Wavelets and pattern metrics. *Ecology and Development Series No. 31. Cuvillier Verlag Göttingen, Germany.* https://books.google.com/books?hl=en&lr=&id=aA3_DwAAQBAJ&oi=fnd&pg=PA5&dq=info:6J8neqvYYcMJ:scholar.google.com&ots=TomUj8yiW8&sig=E3sc8nzBYzNvsx3pes3Ly6cZVpk