# David Kwamena Mensah

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## RESEARCH

| | |
|---|---|
| Interests | Bayesian Methods · Nonparametric statistics · Gaussian process regression · Data fusion for Big Data |
| Areas | Surgery · Obstetrics and Gynecology · Infectious Diseases · Pediatrics, Perinatology and Child Health · Public Health, Environmental and Occupational Health · Cardiology and Cardiovascular Medicine |

## RESEARCH SUMMARY

| 29 | 137 | 6 | 5 | 2.01 | 11% |
|---|---|---|---|---|---|
| Publications | Citations | h-index | i10-index | Field-weighted impact | World top 10% |

Counted from the 29 publications listed below, 2008–2026. Field-weighted impact is the mean over the 18 works scored for it; 1.00 is the world average for works of the same field, type and year. 2 of the 18 papers scored for it are among the world's most cited tenth for their field, type and year.

## POSITIONS

**Senior Lecturer**
Statistics, University of Cape Coast, Cape Coast, Ghana

## PUBLICATIONS

### Journal articles 27

1. Michael Arthur Ofori, Diana Maame Agyeiwaa Agyei, Abena Abokoma Asemanyi, Sesi Sedegah, Theophilus Asamoah, **David Kwamena Mensah** (2026). Assessing antenatal care utilization, socioeconomic inequalities and low birth weight outcomes: a population-based analysis using the 2022 Ghana demographic and health survey data. *BMC Pediatrics*. https://doi.org/10.1186/s12887-026-07213-7
2. Michael Arthur Ofori, **David Kwamena Mensah**, Theophilus Asamoah, Michael Fosu Ofori (2026). Determinants of Low Birth Weight in Ghana: Analysis of the 2022 Demographic and Health Survey. *Health Science Reports*. https://doi.org/10.1002/hsr2.72639
3. Michael Arthur Ofori, Daniel Biftu Bekalo, Aboma Temesgen Sebu, Sylvia Lordis Mensah, **David Kwamena Mensah** (2026). Predictive modeling of CD4 count levels in HIV/AIDS patients with TB co-infection: a machine learning framework for treatment optimization. *Discover Artificial Intelligence*. https://doi.org/10.1007/s44163-026-01431-9
4. **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
5. Michael Arthur Ofori, Daniel Biftu Bekalo, **David Kwamena Mensah**, Niharika Jha (2025). Female genital mutilation among children in Ethiopia: A time-to-event analysis of age at circumcision. *PLoS ONE*. https://doi.org/10.1371/journal.pone.0317966
6. **David Kwamena Mensah** (2025). Impact of Similarity Measure and Fusion Statistics on Vital Signs Data Fusion. *South Eastern European Journal of Public Health*.

7. Michael Arthur Ofori, Daniel Biftu Bekalo, **David Kwamena Mensah**, Niharika Jha (2025). Modelling the risk factors associated with female genital mutilation among the under-five children in Ethiopia, a retrospective study. *Journal of Health Population and Nutrition*. https://doi.org/10.1186/s41043-025-00962-8
8. Stephen Adomako, Irene Kafui Vorsah Amponsah, **David Kwamena Mensah**, James Damsere-Derry (2025). Road Accident Case Modeling in Ghana: A Perspective of Negative Binomial–Based Generalized Linear Models. *Journal of Probability and Statistics*. https://doi.org/10.1155/jpas/3900755
9. **David Kwamena Mensah** (2024). Data recovery methods in composite similarity-based data fusion: Application to Physiological vital signs. *TechRxiv*. https://doi.org/10.36227/techrxiv.173144829.90970008
10. Michael Arthur Ofori, **David Kwamena Mensah**, Ildephonse Nizeyimana, Niharika Jha, Zebunnesa Zeba, Shongkour Roy (2024). High Blood Pressure and Depression Among the Working Population of Ghana: A Generalized Linear Model of the Risk Factors. *Depression and Anxiety*. https://doi.org/10.1155/2024/5261760
11. 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=scholarr
12. **David K Mensah**, Papa Kobina G deGraft-Johnson, Ebenezer O Darkwa, Alexander Akowuah, Owusu-Sekyere Danso, George Aryee, Raymond Essuman, Robert Djagbletey (2024). Perioperative Analgesic Effect of Serratus Anterior Plane Block for Breast Surgery: A Randomized Control Study at a Large Teaching Hospital in Ghana. *Cureus*. https://doi.org/10.7759/cureus.63397
13. NKANSAH BISMARK K., **David Kwmena Mensah** (2023). AUTOMATED THRESHOLD METHOD FOR DIMENSIONALITY DETECTION IN MULTIVARIATE DATA. *Journal of Data Acquisition and Processing*. https://scholar.google.com/scholar?cluster=2146073956527519423&hl=en&oi=scholarr
14. **David Kwamena Mensah** (2023). DETECTION OF EXTREME OBSERVATIONS IN MULTIPLE MULTIVARIATE DATA USING PROJECTION TECHNIQUES: APPLICATION TO FOOD PRICE DATA. *Journal of Data Acquisition and Processing*. https://scholar.google.com/scholar?cluster=16001101495588308935&hl=en&oi=scholarr
15. F Eyiah-Bediako, **D Kwamena Mensah** (2023). Data Fusion for Physiological Vital Signs with Automatic Extreme Value Control. *J. Biomed. Eng*. https://www.researchgate.net/profile/David-Mensah/publication/374087988_DATA_FUSION_FOR_PHYSIOLOGICAL_VITAL_SIGNS_WITH_AUTOMATIC_EXTREME_VALUE_CONTROL/links/650d580ed5293c106cd41b91/DATA-FUSION-FOR-PHYSIOLOGICAL-VITAL-SIGNS-WITH-AUTOMATIC-EXTREME-VALUE-CONTROL.pdf
16. Gladys A. Abindaw Nabieu, Michael Minlah, **David Mensah** (2023). Public debts, fiscal balance and sustainability: What can African governments learn from debt sustainability models? *Cogent Economics & Finance*. https://doi.org/10.1080/23322039.2023.2235827
17. **David Kwamena Mensah**, Francis Eyiah-Bediako, Samuel Assabil (2022). Compendium of Tunable Data-driven Approaches for Smoothing Parameter Learning for Kernel Density-based Normal Systolic Blood Pressure Detection. *Universal Journal of Public Health*. https://doi.org/10.13189/ujph.2022.100209
18. **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
19. **David Kwamena Mensah**, Samuel Assabil, Francis Eyiah-Bediako (2020). On Statistical Approach to Automated Normal Systolic Blood Pressure Detection in Continuously Monitored Blood Pressure Data. https://doi.org/10.7176/jnsr/10-4-05
20. **David Mensah**, Anthony Q.Q. Aboagye, Joshua Y. Abor, Anthony Kyereboah-Coleman (2017). External debt among HIPCs in Africa: accounting and panel VAR analysis of some determinants. *Journal of Economic Studies*. https://doi.org/10.1108/jes-05-2015-0080
21. Esther A Amemor, S O sackey, Nathaniel Yebuah, Raphael Deladem Folitse, Benjamin O Emikpe, E Afari, f

Wurapa, C Ohuabunwo, K Addo, **David mensah**, E Gaglo, Mark-hansen S Johnson, William Tasiame, D Amedzovor, D Nkunafa, Frank Bonsu (2016). THE PREVALENCE OF TUBERCULOSIS IN CATTLE AND THEIR HANDLERS IN NORTH TONGU, VOLTA REGION, GHANA. *African Journal of Infectious Diseases*. https://doi.org/10.21010/ajid.v11i1.2

22. Margaret Atuahene, **David Mensah**, Martin Adjuik (2015). A cross-sectional study of determinants of birth weight of neonates in the Greater Accra region of Ghana. *Maternal Health Neonatology and Perinatology*. https://doi.org/10.1186/s40748-015-0023-4

23. A. Asante-Poku, I. D. Otchere, E. Danso, **D. D. Mensah**, F. Bonsu, S. Gagneux, D. Yeboah-Manu (2015). Evaluation of GenoType® MTBDRplus for the rapid detection of drug-resistant tuberculosis in Ghana. *The International Journal of Tuberculosis and Lung Disease*. https://doi.org/10.5588/ijtld.14.0864

24. **David Kwamena Mensah** (2015). Variational Bayes Methods in Gaussian Process Regression. *ScholarBank@NUS*.

25. Dzidzo Yirenya-Tawiah, Ted N Annang, Kwesi A Apea-Kubi, George Lomo, **David Mensah**, Lorenzo Akyeh, Kwabena M Bosompem (2014). Chlamydia Trachomatis and Neisseria Gonorrhoeae prevalence among women of reproductive age living in urogenital schistosomiasis endemic area in Ghana. *BMC Research Notes*. https://doi.org/10.1186/1756-0500-7-349

26. **David Kwamena Mensah** (2014). LQAS in Health Monitoring–Insights from a Bayesian Perspective. *International Journal of Statistics in Medical Research*. https://www.academia.edu/download/81874497/4d19d3474c00366d3afc64a140c406e14627.pdf

27. NKANSAH BISMARK K., **DKMFEB Mensah**, F Eyiah-Bediako (2008). Empirical Similarity-Based Approach for Selection of Unit Root Test. *Mathematical Theory and Modeling*. https://www.academia.edu/download/116632335/234680609.pdf

### Theses 2

1. **David Kwamena Mensah** (2023). Flexible Bayesian Methods For Inflation Modelling In Ghana. *University of Cape Coast*. https://ir.ucc.edu.gh/server/api/core/bitstreams/c41def37-8e47-4299-a723-33db07b5045f/content

2. **David Kwamena Mensah** (2010). Bayesian Methods for Measuring Acute Malnourishment. *Plymouth University, UK*. https://www.researchgate.net/profile/David-Mensah/publication/242614372_Bayesian_Methods_for_Measuring_Acute_Malnourishment/links/59bc26f8458515e9cfc7c1c7/Bayesian-Methods-for-Measuring-Acute-Malnourishment.pdf