Isaac Ofori Asare

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Career Summary

Isaac Ofori Asare is a statistician and research methodologist with more than nine years of experience in statistical consulting, teaching, and research. Currently pursuing a PhD in Interdisciplinary Health Sciences at the University of Texas at El Paso, he combines expertise in applied statistics, research design, and data analysis with knowledge of data science. He helps researchers and organizations turn complex questions into sound analytical strategies and clear evidence for decision-making.

His current research centers on statistical modeling of health outcomes and the sociocultural, psychological, and geographic factors shaping type 2 diabetes risk and prevention among Hispanic and other underserved populations. He brings a methodological perspective that connects research questions, study design, analytical choices, and interpretation to produce credible, practically useful findings. His developing research agenda explores GIS, spatial statistics, remote sensing, and machine learning to investigate health disparities and inform culturally responsive interventions.

Isaac's professional experience includes statistical guidance and training for individuals, organizations, and academic institutions, alongside teaching and undergraduate research supervision as an Assistant Lecturer. His work is grounded in analytical rigor, clear communication, and a commitment to translating research into decisions that improve programs, strengthen organizations, and advance population health.

Education and Training

University of Texas at El Paso (UTEP), USA

PhD. Interdisciplinary Health Sciences | August 2025-Present

Research focus*:* Applying statistical and data science methods to examine sociocultural, psychological, and geographic influences on diabetes risk and prevention among Hispanic and underserved populations, with interests in spatial analysis and culturally responsive interventions.

University of South Dakota, USA.

PhD. Data Science & Engineering | January 2025 – July 2026

Completed three semesters prior to transfer to UTEP

Kwame Nkrumah University of Science and Technology, KNUST-Ghana.

Master of Science in Applied Statistics| September 2015 -June 2017. Second-Class Upper Division

Research Focus: Forecasting the water level of the Akosombo Dam using autoregressive integrated moving average (ARIMA) models.

Kwame Nkrumah University of Science and Technology, KNUST-Ghana

BSc in Statistics* | September 2012 -June 2015. *Second-Class Upper Division

Research focus: Principal Component Analysis of the water level of Akosombo Dam.

Accra Technical University (formally Accra Polytechnic), Ghana.

Higher National Diploma in Statistics | June 2008-May 2011: Second Class Honours.,

Research focus: Modelling Road accidents cases in Accra.

Work History and Experience

College of Health Science – UTEP: Graduate Research Assistantship | August 2026 -Present

- Conduct statistical analyses and data management for interdisciplinary research examining psychosocial stress, sociocultural determinants, and diabetes-related outcomes among Hispanic populations, USA.
- Apply quantitative and epidemiological methods to investigate health disparities and chronic disease risk factors.
- Support mixed-methods studies through statistical modeling, data visualization, interpretation of findings, and manuscript preparation.
- Contribute to community-engaged research aimed at informing culturally responsive diabetes prevention and management interventions.
- Contributed to grant writing efforts, including proposal development, literature synthesis, and supporting documentation for departmental and faculty research initiatives.

Social Work and Medical School -University of South Dakota: Graduate Research Assistantship |March 2025-July 2026

- I am on a National Institutes of Health (NIH, USA)-Cervical Cancer Project offered by Social Work Program at the University of South Dakota School of Health Sciences, United States of America. Key roles and responsibilities: analyzing data to identify trends, patterns, and relationships for publications and presentations. Responsibilities include designing surveys or experiments, collecting and interpreting data, applying statistical methods, developing predictive models, and presenting findings through reports and visualizations.
- I have worked on projects such as: (1) Alzheimer's disease (AD) knowledge and it associated covariates using latent class analysis among American Indians and Alaska Natives (2) Developing Culturally Tailored Mobile Web App Education to Promote Cervical Cancer Screening: Knowledge, Barriers, and Needs among Indigenous Women (3) Cognitive impairment among Native American adults (4) Breast cancer data analysis

Department of Applied Mathematics & Statistics-Accra Technical University: Assistant Lecturer | August 2021 to date [Full Time, 1.0 FTE, 40 hours per week]

- Delivered lectures on applied statistics, integrated practical data analysis projects to enhance student learning, conduct research, development of curriculum and contributing to the advancement of my field. This role significantly enhanced my expertise in applied statistics and data analysis, bolstered my research and curriculum development capabilities, and contributed to the academic institution's growth by improving the quality of student learning and advancing the field of statistics.

AFOS Digital Capacity (digiCAP), FlexLab- Accra Technical University: Facilitator |[Part Time| January 2023 to date

- Train students in data science, python programming, machine learning, proficiency in ICT, database management system, PowerBI and Excel and statistics. I have provided impactful, hands-on training that equipped students with essential skills, advanced my professional expertise, and contributed to the success and growth of the organizations through the effective application of data science, machine learning, and ICT education.

Ministry of Tourism Arts and Culture, Ghana: Team lead | May 2023 to date [Part Time 0.75 FTE]

- Trained in the ministry research department on excel and statistics application, PowerBI, questionnaire development and advanced data analysis. The training significantly enhanced my proficiency in data analysis and statistical applications while empowering the Ministry's research

team with advanced skills in Excel, Power BI, and comprehensive data analysis techniques. This initiative led to improved data-driven decision-making and more efficient reporting processes within the Ministry.

Macro Research Consult: Team Lead | August 2019-September 2020 [Part Time 0.2 FTE]

- Conducted data analysis and statistical modeling to support business decision-making. Developed and maintained interactive dashboards using web technologies. Collaborated with the IT team to migrate data processing workflows to the cloud. This role has helped to support business decision-making and developed interactive dashboards to enhance data accessibility and visualization. Collaborating with the IT team on migrating workflows to the cloud improved data processing efficiency.

Chartered Institute of Accountant, Ghana: Examiner | June 2018 -August ,2018: [Part Time 0.2 FTE]

- Was Examiner: for the institute in Quantitative Analysis for ATSWA, Accra-Ghana. Serving as an Examiner for the Institute of Chartered Accountants Ghana in Quantitative Analysis significantly enriched my expertise in statistical evaluation and assessment methodologies, while also enhancing the academic rigor of the institution's curriculum, thereby contributing to my professional development and reinforcing the standards of the accounting profession in Ghana.

Ghana College of Nurses and Midwives: Consultant | March 2018-May 2018 [Part Time 0.2 FTE]

- Trained students' nurses and midwives in Computer Literacy. My involvement in the training in computer literacy significantly improved the digital competencies of nurses and midwives, enhancing their professional effectiveness and service delivery.

Korle Bu sub–Medical Department, Accra (Ghana): Consultant | May 2017-september,2017 [Part Time 0.2 FTE]

- Conducted Employees and Patients (Inpatient and outpatients) satisfaction survey and its impact on the facility. This role enhanced my research skills through conducting satisfaction surveys, providing valuable insights that improved patient care and informed organizational strategies for enhanced service delivery.

SNV's programming in Ghana : Consultant | October 2017 -December 2017 [Part Time 0.2 FTE]

- Conducted Data Analysis & Monitoring and Evaluation Services. My consultancy with SNV in Ghana strengthened the organization's monitoring and evaluation frameworks, enhancing data-driven decision-making and equipping stakeholders with critical skills for effective program implementation.

Trans Africa University College, Accra (Ghana): Adjunct Lecturer | July 2017-March2018: [Part Time 0.15 FTE].

- Lecturing undergraduate students in Element of Mathematics; Statistical Computing, Research Methods; Quantitative Mathematics. This role enhanced my teaching skills and academic knowledge, significantly contributing to students' understanding of mathematics and statistics while strengthening the university's commitment to high-quality education.

Ghana Statistical Service, Accra: Integrated Business Establishment Survey (IBES)-Project Supervisor | February 2016-June 2017: [Full Time, 1.0 FTE, 40 hours per week].

- Supervised a team of 15 enumerators (Field workers) to ensure precise data collection and reporting. Created and rigorously reviewed Standard Operating Procedures (SOPs) for the survey data collection and quality checks, establishing robust data governance frameworks. Spearheaded

the integration of innovative data management systems to enhance the efficiency and accuracy of the survey information handling.

Vita Verde Consult, Accra-Ghana: Founder | January 2015-Present [Full Time, 1.0 FTE, 40 hours per week]

- Specialize in Statistics, Econometrics Research & Data Science. We conducted data analysis for various statistics and economic research projects. Specialized in web scraping and textual analysis to collect and interpret data from diverse sources.
- I have enhanced my expertise in data analysis and research methodologies, contributing to the company's success in delivering high-quality insights, while also empowering trained individuals and organizations with essential analytical skills, fostering their capacity to make informed, data-driven decisions.

Committees

Being selected for various research and innovation committees has enriched my expertise while fostering collaboration, enhancing my career development, and contributing significantly to the university's research output and initiatives. These committees included:

Member for collaboration with ESDEV foundation Africa to organize Conference, Accra Technical & ESDEV Ghana, Accra Technical University [September 2024]

- Was a member of the local organizing team for the conference, titled Unlocking Africa's Youth Potential for Socio-Economic Transformation. This role significantly enhanced my project management and collaborative skills, while also providing a platform for local youth and organizations to engage in meaningful dialogue, ultimately contributing to socio-economic development initiatives across the region.

Appointment to department Exhibition and Mini Conference Team, Accra Technical University [April 2022]

- I was part of the planning, organizing and budgeting team for the Annual Applied Research conference

Appointment as a member of the departmental research /Poster Exhibition, Accra Technical University [February 2023]

- I was a member and responsible for the departmental research seminars, conference and exhibitions. Also to mobilize both staff and students to do poster presentations during the research seminars, conference.

Current Research Project:

Cultural Tailoring and Modifiable Risk Awareness: A Quantitative Study of Alzheimer's Disease Risk Factor Knowledge across Ghana's Socioecological Landscape.
Duration: From August -Octomber-2025.

- Designed and implemented a nationwide quantitative study on Alzheimer's risk awareness.
- Preparation of multiple manuscripts for peer-reviewed journals is underway.

Authored Publications

[1] Efua, S. D. V., Antwi, J., **Ofori, A. I**., & Dora, A. (2026). Beyond the Virus: Life Satisfaction and Its Correlates among Persons Living with Chronic Hepatitis B Virus Infection in Ghana, Implications for Holistic Care. Scientific African, e03561**[Q1, SJR, 0.641]**

[2] Senoo-Dogbey, V. E., Wuaku, D. A., Brenya, C. O., Mumuni, A. A., & **Asare, I. O.** (2025). Assessing the psychometric properties of a modified vaccine hesitancy scale for measuring hepatitis B vaccine hesitancy among healthcare workers in Southern Ghana. *BMC Public Health*, *25*, 3178 [**Q1 SJR, 1.359**].

[3] Nana Yaw Asabere ,Sampson Kuworye, **Asare I.O** , Gare Lawson ,1 Diana Seyram Gagblezu, Emmanuel Seme, and Evelyn Bentil (2025). Improving Counseling Sessions Through an Interactive Web-Based Application in the Context of Higher Education [***Q3, SJR,0.437***]

[4] Asabere, N. Y., **Asare, I. O**., Lawson, G., Balde, F., Duodu, N. Y., Tsoekeku, G., ... & Ganiu, A. R. A. (2024). Geo-Insurance: Improving Big Data Challenges in the Context of Insurance Services Using a Geographical Information System (GIS). *Human Behavior and Emerging Technologies*, *2024*(1), 9015012 [***Q1, SJR,1.8***]

[5] Tetteh, J., **Asare, I. O**., Adomako, I., Udofia, E. A., Seneadza, N. A. H., Adjei-Mensah, E., & Yawson, A. (2021). Sex differences and factors associated with disability among Ghana's workforce: a nationally stratified cross-sectional study. *BMJ Open*, *11*(3), e044246[***Q1, SJR,0.97***]

[6] Asare, I. O., & Mensah, A. C. (2020). Crash severity modelling using ordinal logistic regression approach. International Journal of Injury Control and Safety Promotion, 1-8. [***Q2, SJR,0.53***]

[7] Asare, I. O., & Yeboah, J. O. (2022). Application of Multilevel and Panel Data Statistical Techniques in Modelling the Amount of Rainfall in Selected Locals in the Greater Accra Region. International Journal of Social Ecology and Sustainable Development (IJSESD), 13(1), 1-13 [***Q4 SJR,0.16***]

[8] Asare, I. O., & Yeboah, J. O. (2022). Company characteristics and sustainability reporting: evidence from Asia and Africa [***Q4 SJR,0.16***]

[9] Asabere, N. Y., Torgby, W. K., Acakpovi, A., Enguah, S. E., & **Asare, I. O**. Mapping and Auditing Internet Addiction in Technical Education. International Journal of Technology and Human Interaction (IJTHI), 17(1), 14-31[***Q4, SJR,0.2***]

Peer-Reviewed but Not Indexed in Q1/Q2

[10] Ayitey, V., Mensah, B. A., Boateng, P. A., **& Asare, I. O. (2025).** Emotional Skills and Organizational Performance: A Buffering Effect of Personal Profiles. *Journal of Organizational Behavior Research*, *10*(4-2025), 28-42.

[11] Asare, I.O, Frimpong, D. A., Dzotefe, R., Mensah, A. C., & Baffoe, S. (2024). Gender-age effects in assessing attitudes toward statistics among undergraduate students: structural equation approach. *Research in Statistics*, *2*(1), 2327343.

[12] Asare, I. O., Frempong, D. A., & Larbi, P. (2018). Use of Principal Components Regression and Time-Series Analysis to Predict the Water Level of the Akosombo Dam Level. International Journal of Statistics and Applications 2018, 8(6): 332-340

[13] Mensah A.C., **Asare, I.O. (2019).** Proximate Breast Cancer Factors Using Data Mining Classification Techniques. International Journal of Big Data and Analytics in Healthcare (IJBDAH),4(1):47-56.

[14] Mensah, B. A., Achio, S., & **Asare, I. O. (2021).** Effect of service quality on customer satisfaction in selected cafeterias: a structural equation modeling approach. *International Journal of Tourism and Hospitality Management in the Digital Age (IJTHMDA)*, *5*(2), 1-16.

Isaac Ofori Asare currently has manuscripts either under review [*], or in progress [+]. He wrote the statistical analysis plan, contributed material input in introduction, methodology, results and discussion sections of the following manuscripts.

[*] **Asare, I. O**., Exposure to Malaria Messaging: A Nationally Strati ed Cross Sectional Study on Information Dissemination in Ghana and its Implications for the SDGs.

[*] Application of Causal Inference Techniques to Examine the Determinants and Outcomes of Obesity.

Academic Writing Sample

Data-Driven Analysis of Health and Clinical Factors in Alzheimer's Disease Patients [Available upon request]

Certification, Awards and Honors

- International English Language Testing System (**IELTS**): Overall Value of **6.5**
- **DAIR3 Travel Scholarship Recipient |2026**: Data and AI Intensive Research with Rigor and Reproducibility (DAIR3) Program, University of Texas at San Antonio (UTSA).
- **Third Place Award, GRASAG-USA Research Symposium**, April 18, 2026. Awarded for the research presentation: *Early Socio-Behavioral Determinants and Their Differential Influence on Cognitive Impairment Severity in a Ghanaian Community.*
- **July 2025**: Social and Behavioral Responsible Conduct of Research- https://www.citiprogram.org/verify/?w0cd96684-6101-45b9-8360-fe5e269625a1-70704349
- **July 2025**: GCP (Good Clinical Practice) – https://www.citiprogram.org/verify/?w781a9194-fec7-4aef-a571-ec4034ee4903-70704116
- **June 2025:** Certificate of Participation in the IEEE-sponsored 7th AI Symposium with the inaugural South Dakota Biomedical Computation Consortium organized by the Dept of Computer Science, University of South Dakota.
- **May 2025:** Certificate of Achievement: NASA'S Open Science 101 Curriculum.
  2023. Certificate of Achievement: Highest number of quality research publications indexed in Web of Science and /or Scopus.
- **2023** Recognition of Highest Achievement of Quality Research Publication in the Applied Mathematics and Statistics Department, Accra Technical University.

Conferences/ Presentations/Poster

- October 2026: Poster presentation on Social Determinants of Health and Opioid Literacy Disparities Among Indigenous Women- Council on Social Work Education (CSWE) 2026 Annual Conference CSWE Annual conference| Atlanta, GA.
- June 2025: I presented on the topic "Extension of the Topp-Leone Zubair into Parametric Regression for Modeling Censored Health Data" at the 2025 Central Region IDeA Meeting held at the DoubleTree by Hilton Downtown Rapid City Convention Center, USA.
- February 2025 Workshop on Basic Data Analysis Skills for all levels. *Link*: *https://youtu.be/2u7zS7eLxPw.*
- May 2024. Advanced Quantitative Technique in Research for all using IBM SPSS. Link: Advanced Quantitative Technique in Research for all using IBM SPSS DAY 2
- April 2024. Effective pedagogies & assessment in higher education, Accra Technical University.
- Participated in the 3-day conference on effective way of teaching and its impact on our students and staff development.
- May 2023. Structural Equation Modelling and Confirmatory Factor Analysis.
  Link: https://www.youtube.com/watch?v=J9u3lEt9ifM&t=25s
- Participated in the workshop on Big Data Analytics using Python. Techniques on processing large scale datasets using Python were learnt.
- April 25th -27th April,2019: Ghana Data Science Summit 2019 (IndabaX Ghana):
- I participated in the 3-day summit on the theme: The Promise of Data Science for Economic Transformation.
- 24th August 2018 & 2017: DAAD: PhD Proposal Writing Workshop, Noguchi-Accra.

- I participated in the workshop that seeks to train those who want to have their PhD in Germany on effective way of proposal writing.

Undergraduate Student Project Work Supervision

- A Multivariate Analysis of Some Selected Crop Yields Over the Decades in The Ten Regions in Ghana.
- Analysis On the HIV Among Five Selected African Countries.
- Age/Gender Analysis Among People Living with Hypertension in The Greater Accra Regional Hospital.
- Analysis Of Agriculture, Industries, And Services GDP Across West African Countries: A Quantile Regression.

Online Courses/ Trainings

Pursuing online courses in statistics and data science has deepened my expertise, broadened my skill set, and strengthened my research capabilities, significantly advancing my career and aligning with my PhD aspirations.

- Foundation in AWS Cloud Computing
- Qualitative Data Analysis
- Bayesian Data Analysis [Ftu Forum]
- Foundation in Power Platform
- Python Module [AFOS Foundation]
- Knime (Machine Learning) and Databases [AFOS Foundation]
- Excel and Statistics [AFOS Foundation]
- Udemy Courses: Deep Learning Convolutional Neutral Networks in Python, Applied Machine Learning in Python; Bayesian Machine Learning in Python; C++: From Beginner to Expert

Software and Technical Skills

Isaac is a proficient user of advanced statistical techniques and software usage. I conduct online training for students and the public as evidenced in my YouTube channel: *https://www.youtube.com/@asare509/null*.

He specifically uses R-programming, Python, STATA, IBM SPSS, IBM AMOS/ SmartPLS and EVIEWS for his advanced statistical analysis. He has in depth knowledge in these software packages as well as: Basic Linus Foundation, NVIVO, Minitab, Gretl, SAS, MATLAB, MYSQL, LaTeX, XLTAT, GraphPad.

Academic References

- Professor Roh, Soon Hee, Social Work, The University of South Dakota; soonhee.roh@usd.edu
- Professor Yeon-Shim Lee, College of Health & Social Sciences, San Francisco State University; yl375@sfsu.edu.
- Professor Lio, Yuhlong, Department of Mathematical Sciences, University of South Dakota, yuhlong.lio@usd.edu.
- Professor. Nana Yaw Asabere (PhD): Senior Lecturer, Department of Computer Science, Accra Technical University, Ghana. +233-266685011; nyasabere@atu.edu.gh
- Professor. Alice Constance Mensah (PhD): Senior Lecturer, Department of Mathematics & Statistics, Accra Technical University, Ghana; +233-243166170; aabaka@atu.edu.gh
- Dr Richard Nkrumah: Senior Lecturer, Department of Mathematics & Statistics, Accra Technical University; +233-246672742; rnkrumah@atu.edu.gh
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