Gabriel Owusu

Robert C. Vackar College of Business and Entrepreneurship •1201 W University Dr, Edinburg, TX 78539 • gabriel.owusu01@utrgv.edu | 956-651-3312 || google scholar || https://www.linkedin.com/Gabriel Owusu

EDUCATION

The University of Texas Rio Grande Valley
Ph.D. Management Information Systems
Kwame Nkrumah University of Science and Technology | Kumasi, Ghana
Bachelor of Science in Computer Science

June 2019 **GP**A: 3.25

GPA: 4.0

Expected: May 2026

RESEARCH INTERESTS

- Healthcare Analytics for Chronic Disease Management.
- Corporate Sustainability and Al-driven business Analytics.
- Social Media Analytics and Challenges for health.
- Deep Learning and Machine Learning with Time Series Data (Methodology).

MANUSCRIPTS UNDER REVIEW

• Owusu, G., Moqbel, M. From Scrolling to Creating: Social Media's Role in Student Creativity. (Under review, Journal of Computer Information Systems).

CONFERENCE PROCEEDINGS PUBLICATIONS

- **Owusu G.**, Andoh-Baidoo K. F., Ayaburi W. E. (2025) Understanding supporters' response to online petitions: A value system moderated perspective *Proceedings of the 58th Hawaii International Conference on System Sciences* (HICSS 2025).
- **Owusu, G.**, Liao Q., Frimpong, B. (2024) Towards a Privacy-Preserving Healthcare Analytics for Neurological Diseases Management" *Proceedings of the 30th Americas Conference on Information Systems (AMCIS 2024)*. Salt Lake City, Utah.
- Abraham, T., **Owusu**, **G.**, Wang, X. (2024) "Chief Sustainability Officer's Role Centrality and Corporate Sustainability Performance." *Proceedings of the 84th Annual Meeting Academy of Management* (**AOM 2024 Best Paper Nomination**).
- Owusu, G., Wang, X., Sun, J., (2024) "Longitudinal healthcare analytics for early detection and progression of neurological diseases; A clinical decision support system." Proceedings of the 57th Hawaii International Conference on System Sciences (HICSS 2024).
- **Owusu, Gabriel** and Xiao, Nan. (2023) "How does Technological Entitlement Affect Cyberdeviance? The Role of Organizational Justice." *Proceedings of the 29th Americas Conference on Information Systems (AMCIS 2023) August 2023. Panama City.*
- Bonke, C., Sun, J., **Owusu, G.**, Wang, Y. (2023) "Household Digital Twin for Disaster Response." *Proceedings of the 29th Americas Conference on Information Systems* (**AMCIS 2023**) August 2023. Panama City, Panama.

CONFERENCE PRESENTATIONS

- **Owusu, G.**, Wang, X., Sun, G., Chenzhang, B. (2025) "From Onset to Outcomes: Guiding Neurological Disease Care with Al-Powered Precision" *To be presented at Biz Al Conference: Al Applications in Business Research UT Dallas March 2025.*
- **Owusu, G.**, Sun, J., Bonke, C. (2023) "Power Outage Management with a Chatbot." *Presented at the 29th Americas Conference on Information Systems (AMCIS 2023), TREO August 2023. Panama City, Panama.*
- Clinicians' adoption of clinical decision support system: A mixed methods approach *Presented at SIPCE 2024 Third Annual Conference for Interdisciplinary Research*.
- Longitudinal healthcare analytics for neurological diseases management Presented at Florence Nightingale day, School of Mathematical and Statistical Sciences – UTRGV.

IN PROGRESS AND WORKING PAPERS

- "Comprehending Generative Al Adoption: An Integrated X Analytics and SEM Approach" with Hong, Q., Meah, R. M., & Wang, B
- "From Onset to Outcomes: Guiding Neurological Disease Care with AI-Powered Precision" with Wang, X., Sun, G., & Chenzhang, B.
- "Clinicians' adoption of clinical decision support system: A mixed methods approach" with Wang, X., Sun, G., & Chenzhang, B.

- "Understanding supporters' response to online petitions: A value system moderated perspective" with Andoh-Baidoo, F & Ayaburi, E.
- "Social media as a platform for sustainability disclosures: Implications for Corporate Reputation" with Meah, R. M, & Wang B.
- "Corporate Sustainability Performance: The Fourfold Centrality of the Chief Sustainability Officer" with Abraham, T., Ghazali, M., & Wang, X.

AWARDS AND GRANTS

•	NAIRR Pilot AI Unlocked Workshop Grant (\$5500)	S pring 2025
•	Robert C. Vackar COBE Ph.D. Student Research Grant Award (\$700)	Spring 2025
•	National Science Data Fabric Fellowship (\$2800)	Fall 2024
•	Robert C. Vackar COBE Ph.D. Student Research Grant Award (\$1000)	Summer 2024
•	PhD Student Excellence Award – RCVCOBE IS Department	May 2024
•	PhD Student Research Excellence Award – RCVCOBE	April 2024
•	Presidential Research Fellowship (\$20,000)	August 2023-July 2025
•	Best Poster Presentation Award – Florence Nightingale Day (\$200)	February 2024
•	Graduate student travel award	Spring 2024
•	Robert C. Vackar COBE Scholarship Award (\$150)	April 2024
•	Travel and Participation grant, Conference on Health IT and Analytics (CHITA) (\$3700)	May 2023
•	Robert C. Vackar COBE Ph.D. Student Research Grant Award (\$700)	March 2023

TEACHING

• INFS 2300 – Data Modelling Management Tools - In progress

Spring 2025

WORKSHOP

MISQ Paper Development Workshop

Summer 2024

PROFESSIONAL EXPERIENCE

Robert C. Vackar College of Business and Entrepreneurship, UTRGV Presidential Research Fellowship | Graduate Research Assistant

Edinburg, Texas August 2022 - Present

- Building NeuroPulse, an AI-CDSS for early detection and diseases progression of neurological diseases, ML methods (SVM, RF, LR, XGBOOST) DL methods (ANN, ELM, Transfer Learning (ResNet, VGG16, AlexNet)). Advisor Xuan Wang, Ph.D.
- Designing personalized treatment plans for Neurological diseases (Alzheimer Disease) with a large longitudinal dataset.

Amazon.com 2X Data Engineering Intern – AWS Health

Phoenix, Arizona Summer 2024, 2025

- Designing an automated framework to perform data quality checks on incoming data prior to data ingestion (Technologies AWS glue, DynamoDB, Spark SQL, Scala, Python, GIT).
- Optimizing assigned Spark SQL queries for non-relational databases of the team to reduce latency of the existing stack, AWS for data modeling, data warehousing and building ETL pipelines.

Moja Group Inc. Data and Business Intelligence Analyst

Accra, Ghana July 2021 – August 2022

- Designed and implemented an advanced business intelligence model from ground up to report business requirements (KPIs) with Tableau, PowerBI, and Grafana dashboards for sales, finance, and marketing teams to make data-driven decisions.
- Partnered with the game development and marketing divisions to optimize model parameters, resulting in **98%** predictive accuracy, and contributing to a **15%** uplift in **Q4** gross game revenues.

AirtelTigo Ghana Limited Business Intelligence Analyst

| Accra, Ghana September 2019 – June 2021

- Championed the automation of subscriber inactivity and CVM for all campaigns, and this led to consistent improvement in net disconnections, increased daily active subscribers, and significantly improved our churn rate, reducing it by **20%**.
- Provided analytical support to Performance and planning team in providing insights and recommendations on a product to
 management which influenced business decision leading to a reduced disconnection by 53K subscribers each month. This
 increased revenue by 2.5% month on month.
- Drastically reduced reports processing time by employing database practices such as indexing and partitioning, as well as creating key relationships between facts and dimension tables to decouple OLAP processing for multidimensional cubes. This improved the reaction time of business bucket owners by 50%. (DBMS SQL server).

SKILLS

Data Analysis and Visualization Tools: Python, R, Advanced MS Excel, Power BI, Tableau, DAX, LIWC.

Programming Languages: Python, R, HTML5, CSS

Database Management: MSSQL, MYSQL, MariaDB, Oracle, Advanced MS Excel, MS Access.

ETL and Data Warehousing: Visual Studio, SSRS, SSIS, SSAS, SSDT, Linux Cent OS.

SERVICE

- Ad-hoc Reviewer at Information Systems Frontiers (ISF) and ICT for Development (ICT4D) journals.
- Conference Session Chair for "Moving beyond traditional constructs in Information systems Research, Emergent Research for Engaged Learning Track" – Americas Conference on Information Systems (AMCIS) 2023, Panama City.
- Ad-hoc Reviewer at Annual Meeting of the Academy of Management (AOM), 2023; 2024.
- Ad-hoc Reviewer at Hawaii International Conference on System Sciences (HICSS), 2023; 2024
- Ad-hoc Reviewer at International Conference on Information Systems (ICIS), 2023; 2024.
- Ad-hoc Reviewer at Americas Conference on Information Systems (AMCIS), 2023; 2024.
- Doctoral Student Conference Volunteer AMCIS 2023; AMCIS 2024.
- Student Mentor UTRGV Career Centre.
- Be My Eyes International Volunteer for Assisting Individuals with Sight Deficiency August 2016 to present.

PROFESSIONAL ASSOCIATIONS

• Member, Association of Information Systems (AIS)

August 2022 - Present

Member, Special Interest Group on High Performance Computing (SIGHPC)

October 2024 – Present

SKILLS

Data Analysis and Visualization Tools: Python, R, Advanced MS Excel, Power BI, Tableau, DAX, LIWC.

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Database Management: MSSQL, MYSQL, MariaDB, Oracle, Advanced MS Excel, MS Access.

ETL and Data Warehousing: Visual Studio, SSRS, SSIS, SSAS, SSDT, Linux Cent OS.

PROJECTS

- The Stub Online Management Portal, a web-based solution for The Stub, Accra, a multipurpose production company and creative hub. Tech NoSQL (Firebase), Flask, Go.
- Corporate sustainability disclosures and reputation: A big data-driven approach from Twitter and online experiment.

CERTIFICATIONS

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•	Principles of Leadership: Leading Technical Teams from University of Colorado Boulder	Coursera, 2024
•	Data Analysis Using Python from University of Pennsylvania	Coursera, 2023
•	Supervised Machine Learning: Regression and Classification from Stanford University	Coursera, 2023
•	Google Data Analyst Certification	Coursera, 2022