




# ESTHER OKOLIE

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## PROFILE SUMMARY

With a master's degree in computer science, I am an experienced and certified Data Analyst with a strong background in programming, statistics, machine learning, and their practical uses. In my current position, I analyse various data techniques to uncover and address discrepancies in sales profit margins, offering strategies to enhance profitability. With over two years of experience as a data analyst, I excel in SQL, Python, machine learning, Power BI, and Tableau, showcasing exceptional analytical and technical skills.

## SKILLS

- Predictive Analytics
- Tableau
- AWS
- Data Analysis
- Machine Learning and Algorithms
- Python
- Data Mining
- Agile Methodology
- Exploratory Data Analysis
- Power BI
- Git
- Excel

## WORK EXPERIENCE

### Data Analyst

February 2024 to Present

#### Technical Assistance Program, Purdue University

- Collect, clean, and organize data from various sources to ensure accuracy and consistency.
- Analyze large datasets to identify trends, patterns, and insights that inform business decisions.
- Use statistical techniques and software (Excel, and Python) to analyse data and generate reports.
- Create visual representations of data using tools like Tableau, Power BI, or Excel to communicate findings clearly.
- Prepare detailed reports and presentations that summarize findings and recommend actions based on data analysis.
- Consult with stakeholders to define data requirements and ensure analysis aligns with business goals.
- Identify opportunities to improve data processes, increase efficiency, and reduce errors.

### Data Scientist

May 2024 to August 2024

#### Laboratory of Data Science

- Researched and implemented advanced data analysis techniques, including data wrangling and predictive analytics.
- Gathered, cleaned, and prepared data from various sources to ensure high-quality inputs for analysis.
- Designed automated dashboards in Tableau and Power BI, enhancing data visualization and decision-making processes.
- Investigated and applied machine learning algorithms to optimize feature reduction in large datasets.
- Collaborated in a team and with the supervisor to devise innovative methods for solving data science challenges.
- Clearly communicated and documented insights and findings in such a way as to drive decision-making into action by the clients and stakeholders.

### Information Technology Services Lab Consultant

October 2023 to Present

#### Purdue University Fort Wayne

- Provide attentive support to students utilizing the computer lab, hence enhancing their experience.
- Maintain and ensure the seamless operation of computers and printers within the lab which prolonged their lifespan.
- Offer technical assistance to lab users, proficiently resolving hardware and software issues.
- Ensure the proper maintenance, updates, and virus protection of computers to increase their lifespan and efficiency.
- Deliver exceptional customer service, addressing user inquiries and issues with a friendly and professional approach.
- Collaborate with IT personnel and faculty to meet specific technical requirements and execute projects related to the lab.

**Assistant Lecturer**

**December 2019 to August 2023**

**Federal College of Education (Technical), Gombe State**

- Developed comprehensive lecture materials and delivered engaging lectures in a classroom setting. Additionally, designed challenging yet fair examination questions.
- Evaluated and assessed student performance through meticulous script grading and effective feedback.
- Participated in Teaching Practice (TP), contributing to student evaluation and grading during practical training.

## **EDUCATION**

**Purdue University Fort Wayne, IN, USA**

**August 2023 to May 2025**

Master of Science in Computer Science

**Houdegbe North American University, Benin Republic**

**November 2013 to August 2017**

Bachelor of Science in Computer Engineering Technology

## **PROFESSIONAL TRAINING & CERTIFICATIONS**

- [Certificate in Data Analytics](#) (Best Graduating Student) | HerTechTrail Academy | March 2023
- [Data Analyst Associate Certification](#) | DataCamp | Nov 2022

## **PROJECTS**

### **Exploring and Segmenting 3rivers Customers Through Machine Learning**

In this project, my team utilized unsupervised learning techniques such as K-Means, PCA and Hierarchical clustering to segment customers based on the customer records from 3rivers. The aim of the project was to separate and group customers based on their habits, needs and behaviors for the purpose of product recommendation and marketing.

### **Analysing Data Pertaining to Sales to Attain Extensive Business Insights for Marathon Labels INC**

This project provided the client with detailed insights into their estimated vs actual gross profit margins as well as factors influencing the same through a comprehensive analysis of the reports and data provided by the company. This project provided detailed insights into the overall sales revenue in Marathon Labels as well as an analysis on the discrepancies in the sales report between Billing and Actual Costs as reported by the sales manager.

### **Extensive Analysis on Patients Experience in Public Health**

This project used data analytics techniques to provide an extensive analysis of public healthcare based on the data provided by Medicare and Medicaid, which is available on the website of the Center of Medicare and Medicaid Services (CMS). It focused on giving insights into the patient's experience in facilities in the US. The analysis compared the experience in different regions and some selected states in the US based on payment received, number of facilities, overall hospital rating, staff responsiveness, care transition, emergency, and vaccination.

### **Photorealistic Text to Image Generation Using Attention Generative Adversarial Network (GAN) Models**

This project focused on building Attention GAN, a type of neural network to generate and convert texts to images. 3 distinct GAN architectures were experimented with in this project: Deep Convolution GAN (DCGAN), Self-Attention GAN (SAGAN) and Deep Fusion GAN (DFGAN). The models were trained on existing datasets which contain 202,599 face images, each meticulously annotated with 40 binary attributes, capturing intricate facial nuances like hair color, facial expressions, and the presence of eyewear.

## **PROFESSIONAL MEMBERSHIP**

Society of Women Engineer Member

**August 2023 to Present**

Institute of Electrical and Electronics Engineers (IEEE) member

**August 2023 to Present**