

Peter Ozo-ogueji

+1 (202) 977-1952 | peterchika3254@gmail.com | Washington, DC, USA | LinkedIn | GitHub | Portfolio

PROFESSIONAL SUMMARY

Results-driven Data Scientist with 7+ years delivering production ML systems that generate measurable business impact. Achieved \$2.1M annual cost savings through fraud detection systems and 30%+ model performance improvements via advanced ensemble methods. Proven expertise in healthcare analytics, financial services, and end-to-end ML pipeline development with strong cross-functional collaboration skills.

TECHNICAL SKILLS & CORE COMPETENCES

Programming Languages: Python, R, SQL, JavaScript
ML/AI Frameworks: TensorFlow, PyTorch, Scikit-learn, Keras, XGBoost, LightGBM
MLOps & Deployment: Docker, AWS SageMaker, Model Deployment, Cross-validation, Hyperparameter Tuning
Data Visualization & BI: Tableau, Power BI, Matplotlib, Seaborn, Plotly, D3.js, Business Intelligence
Big Data & Cloud: Apache Spark, Hadoop, AWS (S3, EC2, SageMaker), Microsoft Azure
Databases: PostgreSQL, MongoDB, MySQL, Redis
Statistical Methods: Regression Analysis, Time Series (ARIMA, GARCH, VAR), Bayesian Methods, A/B Testing
Development Tools: Git, Docker, Streamlit, R Shiny, Jupyter, Google Colab

EDUCATION

Dual Degree: MS Business Analytics & AI MS Data Science	American University Washington, DC	Aug 2023 - Dec 2025 GPA: 3.8/4.0
Master of Science, Mathematics	Philippines College of Health and Sciences Manila, PH	Aug 2019 - July 2021 GPA: 93/100
Bachelor of Science, Statistics	Federal University of Technology Owerri, Nigeria	Sept 2010 - Dec 2015

PROFESSIONAL EXPERIENCE

Data Scientist METY Technology Washington, DC <i>Healthcare AI startup developing wellness applications for Health and Longevity</i>	May 2024 - Present
<ul style="list-style-type: none">Developed MyYouthSpan Health App Success Prediction Model using Gradient Boosting and feature engineering → Achieved 84.4% accuracy with cross-validation and hyperparameter optimizationPresented predictive model insights and ROI analysis to C-suite executives → Directly influenced MyYouthSpan Health App development strategy and feature prioritizationConducted comprehensive meta-analysis of 180 health app studies using statistical significance testing → Identified AI-powered features as primary subscription conversion driversOptimized feature combinations through multivariate testing → Achieved 34.7% success improvement with AI + Wearable + Community + Coach combination → Delivered 6 critical marketing factor recommendations	
Graduate Teaching Assistant American University-CAS Washington, DC	Aug 2024 - Present
<ul style="list-style-type: none">Instructed Statistical Machine Learning and Data Science Applications for 200+ graduate students → Improved course evaluation scores by 20% through innovative Python-based tutorialsEnhanced student performance in regression analysis, hypothesis testing, and ML concepts → Achieved 20% improvement through hands-on Python tutorials and practical projectsDeveloped innovative curriculum in probability theory and statistical decision-making → Increased student understanding by 15% through interactive learning approaches	
Data Analyst Polaris Bank Limited Owerri, Nigeria Owerri <i>Commercial bank with \$2B+ assets serving 500K+ customers across 260+ branches</i>	April 2018 - July 2023
<ul style="list-style-type: none">Led implementation of machine learning fraud management system using IBM's big data platform → Reduced fraud incidents by 30% and achieved \$2.1M annual cost savingsDesigned enterprise data warehouse architecture with ETL pipelines and data governance frameworks → Facilitated 35% increase in analytics adoption while reducing infrastructure costs by 15%Created 50+ executive dashboards using Power BI and SQL → Supported strategic decision-making with real-time KPI monitoring and predictive insightsApplied advanced analytics for customer insights using ARIMA time series forecasting, multivariate regression, and clustering	

→ Optimized customer segmentation and revenue strategies

KEY PROJECTS & IMPACT

Real-Time Auto Loan Pricing Engine - [Link to Project](#)

Technologies: XGBoost, API Integration, Real-time Data Pipelines

- Built ML-driven dynamic pricing model with real-time rate adjustments and competitive positioning
 - Generated \$5.1M annual revenue improvement (5,150% ROI)
- Achieved 73.47% AUC with processing speeds 2,016x faster than manual methods
 - Integrated live market data from 15+ financial institutions

Customer Churn Prediction Engine - [Link to project](#)

Technologies: Ensemble Learning, SMOTE, Advanced Feature Selection

- Improved minority class recall from 0% to 99% using advanced SMOTE balancing and ensemble techniques
 - Created \$4.9M annual revenue impact through proactive retention strategies
- Achieved 83.15% AUC enabling targeted customer interventions
 - 95% precision in high-risk customer identification

Speech Emotion Recognition Platform - [Link to project](#)

Technologies: Python, XGBoost, LightGBM, Random Forest, Streamlit

- Engineered production-ready ensemble ML system with 191 engineered audio features
 - Achieved 82% accuracy across 8 emotion classes
- Developed scalable emotion analytics solution for customer service optimization
 - Potential to reduce manual analysis costs by 70% with real-time insights

Multimodal Hate Speech Detection - [Link to project](#)

Technologies: BERT, ResNet50, PyTorch, Multimodal Fusion

- Built multimodal ML system combining BERT text analysis and ResNet50 image processing
 - Achieved 66% accuracy on 10,000 memes using advanced fusion techniques
- Engineered high-dimensional feature representations with IVA fusion outperforming CCA by 6% F1-score
 - Created scalable content moderation solution with \$3.5M projected cost savings

LEADERSHIP & ACHIEVEMENTS

Google Hackathon Competition Winner | Washington, DC

- Led winning team leveraging SQL, BigQuery, Python, and Tableau to conduct exploratory data analysis
 - Delivered compelling visualizations and solutions for real-world business challenges
- Utilized Google Cloud Platform's advanced analytics tools to tackle complex data problems
 - Demonstrated expertise in data analysis, visualization, and executive-level presentation skills
- Collaborated with multidisciplinary team of professionals showcasing effective teamwork and project management
 - Successfully engaged with Google's Public Sector team and AU Analytics Club stakeholders

Smith Analytics Consortium's 5th Annual Datathon | Washington, DC

- Developed comprehensive NBA expansion strategy using predictive modeling and geospatial analytics
- Selected Seattle, WA and Kansas City, MO as optimal expansion cities through Random Forest algorithms
- Created interactive Tableau visualizations supporting data-driven business recommendations

AI & Robotics Club Executive Member | American University

- Led technical workshops on machine learning implementation and industry best practices
- Increased club membership by 40% through engaging technical content and networking events
- Organized networking events connecting students with data science professionals

CERTIFICATION & PROFESSIONAL DEVELOPMENT

In Progress: AWS Certified Machine Learning - Specialty

Completed: Google Analytics Individual Qualification (IQ)

Professional Training: Advanced Statistical Methods, Deep Learning Specialization, Business Intelligence Certificate