

ONYEDIM CHIZURUOKE

Frisco, TX | 2817078871 | onyedimsamuel@gmail.com | www.linkedin.com/in/chizuruoke-onyedim-78a280297

Professional Summary

Aspiring Data Scientist with experience building and evaluating 9 machine learning models on 31,865+ observations, improving predictive performance by using Random Forest and SHAP-based interpretability. Developed a retail forecasting model using feature engineering to support real-world site selection decisions. As a Data Analytics & Strategy Extern at Beats by Dre, I applied data research and market analysis to evaluate wireless product trends and campaign effectiveness, translating consumer insights into actionable marketing recommendations. A unique ability to connect technical analysis to business and marketing strategy. Multi-faceted data scientist with expertise in: Java - SQL - Python - Power BI - R - Excel - SPSS - SAS - Tableau Feature Engineering - Predictive Modeling - Statistical Analysis - Machine Learning - SHAP

Work Experience

Research Project

Jul 2025 - Present

INTERPRETABLE MACHINE LEARNING ANALYSIS ON COVID-19 VACCINATION UPTAKE
CO-AUTHOR, IN THE PROCESS OF BEING PUBLISHED

This project applies advanced machine learning methods to understand the drivers of COVID-19 vaccination uptake using a large, nationally representative dataset. The study emphasizes both predictive accuracy and interpretability, contributing to public-health decision-making and academic research.

- Applied nine machine learning algorithms (Random Forest, XGBoost, SVM, LASSO, Logistic Regression, etc.) to predict COVID-19 vaccination uptake from 31,865 NHIS observations, achieving higher predictive accuracy than baseline models
- Implemented SHAP (Shapley Additive Explanations) to interpret feature importance across demographics, revealing the most influential factors for vaccination decisions
- Identified key predictors such as routine vaccinations, education level, and income-to-poverty ratio, and mapped demographic patterns in vaccination uptake
- Presented findings at the 2025 North Texas Regional Economists Conference.

Kalibrate

Feb 2025 - May 2025

RETAIL SALES FORECASTING MODEL

- Built a predictive model in R to evaluate site selection for Kalibrate, enabling the team to identify high-potential locations
- Selected and engineered features from more than 50 demographic, geographic, and competitive variables using correlation analysis and VIF diagnostics, which reduced multicollinearity and improved model stability
- Developed linear, log-linear, and Elastic Net regression models, achieving an R2 of 0.56 on hold-out data.
- Delivered actionable recommendations for five potential store locations based on model projections and error metrics (RMSE, MAE), helping prioritize expansion decisions
- Presented findings and deployment strategies to Kalibrate representatives using a concise slide deck, leading to agreement on next steps for model implementation

Delc Medical Center

Aug 2022 - Aug 2024

HEALTHCARE DATA COORDINATOR

- Managed patient records in the Freed and eClinical databases, ensuring data accuracy that supported timely clinical decisions
- Handled phone inquiries, quickly resolving patient questions and reducing repeat call-backs
- Assisted in data entry, record management, and reporting which improved patient services.

Beats by Dre

May 2024 - Jul 2024

DATA ANALYTICS & STRATEGY EXTERN

- Conducted research on wireless devices using Python and SPSS, delivering analytical evaluations that guided product-roadmap decisions
- Developed comprehensive campaign effectiveness reports with SAS and Tableau, delivering clear, accurate data visualizations that enabled stakeholders to make informed decisions
- Submitted research findings after applying R-based feature-engineering and clustering techniques, delivering specific recommendations that supported strategic decisions

Education & Certifications

Austin College

Aug 2022 - May 2026

Bachelor of Science, Computer Science, Economics (GPA: 3.72/4.00)

Sherman, Texas

- **Achievements:** Presidential Scholarship Recipient, Thomas Edgar and Kathryn Heard Craig Fellowship Award, Alpha Lambda Delta Honors Society, Dean's List (2022,2023,2024)
- **Coursework:** Micro & Macro Economics, Predictive Analytics, Intermediary Economics, Labor Economics, Data Structures and Algorithms, Programming Languages, Econometrics, Calculus I, Statistics, Discrete Math, Business Analytics

Leadership Experience

Austin College | *Vice President, Computer Science and Robotics Club*

Aug 2024 - May 2025

United Nations | *Volunteer*

Jun 2022 - Jul 2022