



JOB POSTINGS DASHBOARD

Using machine learning and data visualization to identify and reduce job scams

Total Job Ads

202

Real Jobs (%)

67%

Fake Jobs (%)

33%

Prediction Accuracy

97%

Most Frequent Role

Accountant

Real vs Fake

All

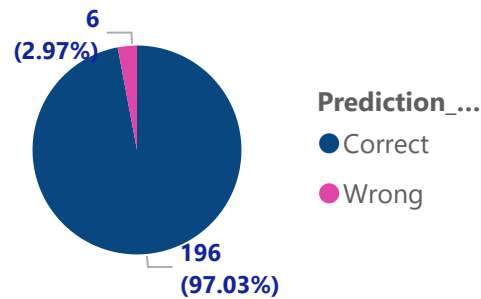
Employment Type

All

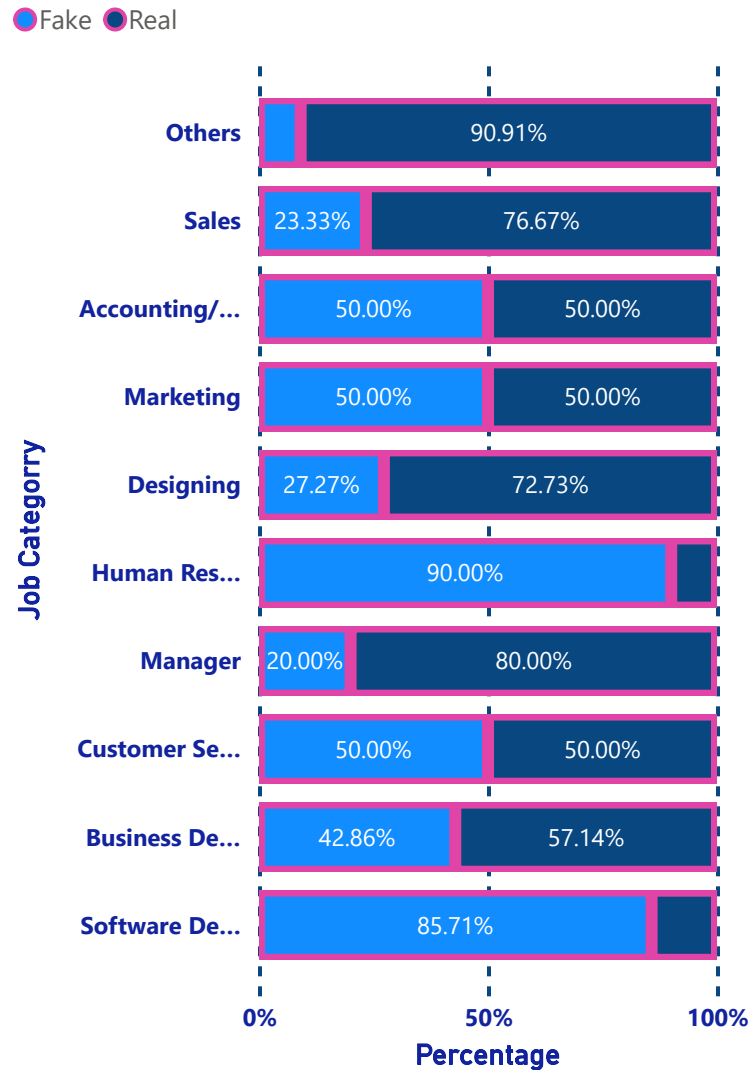
Location (State)

All

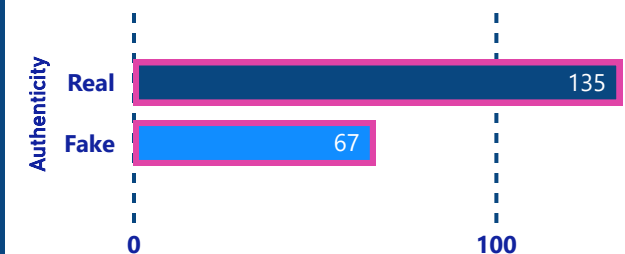
ML Prediction Accuracy



Top 10 Job Categories

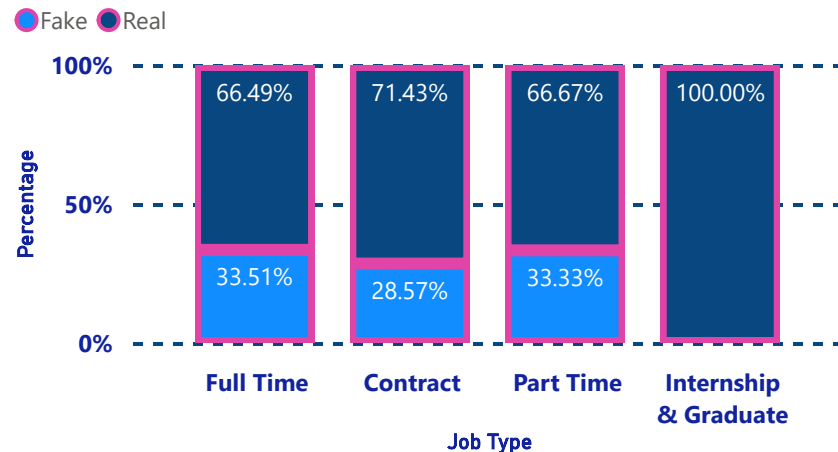


"Real" vs "Fake" Jobs Distribution

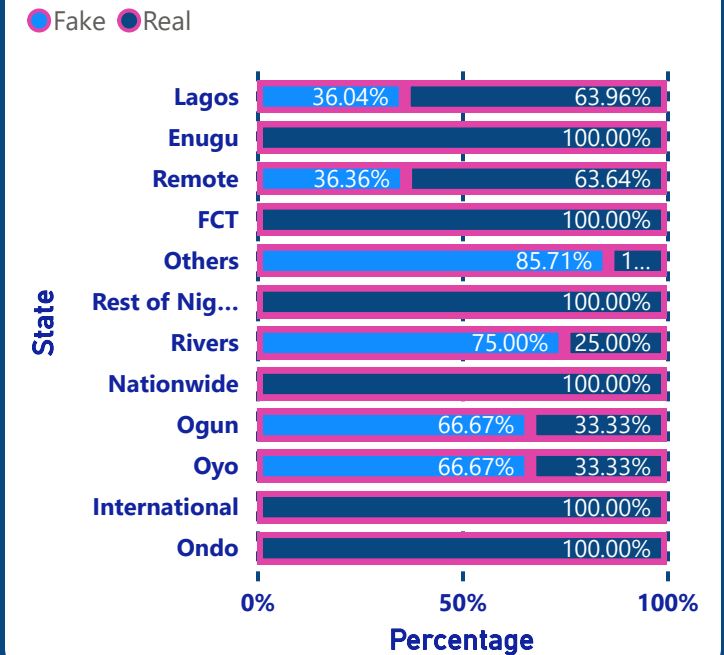


Job Listings by Employment Type

Real VS Fake Breakdown



Job Ads Distribution by States



Job Postings Dashboard Report

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Introduction

With job seekers increasingly vulnerable to fake employment opportunities, distinguishing between real and fraudulent job postings has become a pressing challenge. This project combines data analysis and machine learning to evaluate job postings, uncover trends, and offer a tool to flag potential scams. The dataset used includes 202 job listings from various Nigerian cities, industries, and job types. A machine learning model was trained using ScikitLearn to predict whether a job posting is real or fake, and Power BI was used to visualize patterns and build an interactive dashboard.

Data Cleaning Process

Before analysis, the dataset underwent cleaning using PowerQuery in Power BI:

- *Standardized job titles into broad categories (e.g., Sales, Accounting, IT, HR)*
- *Grouped and normalized locations (e.g., Lagos, Abuja, Rivers, Remote)*
- *Created new columns:*
 - *Label_Text for readability (Real/Fake)*
 - *Cleaned versions of Job Title and Location*
- *Verified completeness: no null or missing values*
- *Merged AI model predictions with original data for full integration*

Insights Summary

1. Job Authenticity Distribution

- *Out of 202 listings, 67% were real, while 33% were fake*
- *The trained AI model achieved 97% prediction accuracy, correctly identifying 196 out of 202 listings.*

2. Most Frequent Role

- *Accountant appeared most frequently among all roles*

3. Job Categories at Risk

- *Certain categories (e.g., Sales, Customer Service, Business Dev) showed a notable share of fake listings*
- *High-risk categories had up to 42% fake job ratio*