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## **CAREER OBJECTIVE**

Highly analytical and detail-oriented Data Analyst with 1 year of experience in analyzing complex data and generating actionable insights. Proficient in Excel, MySQL, Python, Power BI, Machine Learning, Deep Learning, and NLP. Experienced in statistical analysis, data visualization, and building predictive models to drive data-driven decision-making. Seeking to apply analytical expertise and technical skills to support business growth and optimize data-driven strategies.

# **PROFILE SUMMARY**

- 1 year of experience as a Data Analyst, with a strong focus on data manipulation, analysis, and reporting.
- Proficient in analyzing large datasets using Excel, MySQL, and Python libraries such as Pandas, NumPy, Matplotlib, and Seaborn.
- Skilled in **exploratory data analysis (EDA**), statistical analysis, and generating insights to support business decision-making.
- Expertise in data preprocessing, including data cleaning, feature engineering, imputation, and transformation to ensure high-quality data for analysis.
- Experience in building and deploying machine learning models for predictive analysis and classification using algorithms like Linear Regression, Logistic Regression, Random Forest, and Kmeans Clustering.
- Knowledge in **deep learning techniques**, including working with **neural networks** for tasks like image recognition and **NLP**.
- **Natural Language Processing (NLP)**, including text preprocessing, sentiment analysis, and language modeling.
- Knowledge of **SQL** for querying and managing **databases**, and proficient in performing data aggregation and transformation.
- Strong experience in visualizing data and creating interactive reports and dashboards using Power
  BI.
- Familiar with **data modeling** concepts and able to work closely with business stakeholders to understand requirements and translate them into actionable data-driven insights.
- Experienced in presenting analytical results to non-technical stakeholders with clear, actionable recommendations.
- Self-driven, organized, and committed to continuous learning in data science, machine learning, deep learning, and NLP.

# **TECHNICAL SKILLS**

- Programming Language: Python (Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn)
- Databases: SQL, MySQL
- Data Analysis: Exploratory Data Analysis (EDA), Feature Engineering, Data Cleaning,
  Dimensionality Reduction
- Machine Learning: Linear Regression, Logistic Regression, K-means Clustering, Random Forests, K-Nearest Neighbors (KNN), Decision Trees, Gradient Boosting, Scikit-learn
- Deep Learning: ANN, CNN, RNN, LSTM, TensorFlow, Keras, Loss Functions, Optimizers,
  Activation Functions
- Natural Language Processing (NLP): Text Classification, Named Entity Recognition (NER),
  Sentiment Analysis, Tokenization, Word Embeddings
- Data Visualization: Power BI Desktop, Tableau
- Version Control: Git, GitHub

- Development Tools: Spyder, Jupyter Notebook, Anaconda
- Other Tools: Excel, Microsoft PowerPoint
- Soft Skills: Communication, Teamwork, Problem solving, Critical thinking, Time management

## **WORK EXPERIENCE**

Worked as Junior Analyst in KSR DATAVIZON, from Nov 2023 to Nov 2024.

## **EDUCATION**

• Secured 9.13% in Master's in Data Science, KL University, Guntur, Andhra Pradesh in 2025.

## PROJECT SUMMARY

# Project 1:

Project Name : Retail Business Loss Prediction for The Kroger Co.

• Client : The Kroger Co

• Technology/Tools: SQL, Power BI, Python, Machine Learning

Role : Data Analyst

Project Duration : Nov 2023 – Nov 2024

# **Roles & Responsibilities:**

#### **Data Acquisition:**

- Collect and analyze historical store-level data from Kroger, including sales data, inventory data, product information, and store data.
- Integrate external data (e.g., local crime rates, weather patterns) to enrich the dataset.

#### **Data Preprocessing:**

- Clean the dataset by handling missing values and performing necessary data transformations.
- Engineer new features, such as product display location and store security measures, to improve shrink prediction.
- Encode categorical variables, such as product category.
- Perform initial analysis to examine shrink distribution across various product categories, store locations, and time periods.

# **Exploratory Data Analysis (EDA):**

- Visualize shrink trends, using heatmaps and other visual tools to analyze shrink data by product category and store location.
- Identify correlations between shrink and other variables like sales volume and weather conditions.
- Segment stores based on shrink levels and analyze common patterns or characteristics of stores with higher shrink rates.

#### **Model Selection and Training:**

- Explore and implement various machine learning algorithms (e.g., Random Forest Regression, Gradient Boosting Regression, K-Means Clustering) to predict shrink or identify patterns.
- Split the data into training, validation, and testing sets to ensure model generalization.
- Train the models on the training data and evaluate performance using metrics such as Mean Absolute Error (MAE) or R-squared.
- Fine-tune hyperparameters of the best-performing models to optimize accuracy.

### **Model Selection and Training:**

- Deploy the selected machine learning models to identify stores at higher risk of shrink.
- Develop visualizations and dashboards for store managers to present shrink predictions and

contributing factors.

• Continuously monitor the model's performance and re-train it with new data periodically to maintain its accuracy.

#### **Project 2:**

• **Project Name** : Music Recommender System

• Technology/Tools: Python, Cosine Similarity, NLTK, Streamlit, Spotify API, Pickle

#### **Roles & Responsibilities:**

#### **Data Collection:**

• Gather a large dataset of songs, including attributes like artist, song name, and lyrics.

### **Data Preprocessing:**

- Clean the song lyrics dataset (remove unwanted characters and ensure data integrity).
- Use text processing techniques (stemming, regular expressions) to prepare the text for analysis.

## **Text Tokenization & Vectorization:**

- Tokenize lyrics into words.
- Convert text into numerical vectors using methods like TF-IDF, Bag of Words, or Word2Vec.

## **Similarity Calculation:**

• Implement cosine similarity to measure similarity between song lyrics and recommend similar songs.

## **Recommender System:**

- Develop a Content-Based Filtering system to recommend songs based on lyric similarity.
- Use cosine similarity for song comparison.

#### **Model Storage:**

• Save the model and similarity data using pickle for future use.

#### Web Application:

- Build a web app with Streamlit to allow user interaction (song selection, recommendations).
- Integrate Spotify Web API to fetch album covers, with error handling for missing data.

## **App Deployment:**

• Deploy the app locally using Streamlit.

#### PERSONAL PROFILE

Date of Birth : 02-09-2001

Gender : MaleMarital Status : SingleNationality : Indian

Languages : English, Telugu, Hindi

# **DECLARATION**

I hereby declare that the above-mentioned information is correct up to my knowledge and I bear the responsibility for the correctness of the above-mentioned particulars.

Place: Bengaluru RAMA GOPALA KRISHNA MASANI