

# **DATA ANALYST**

**INTERNSHIP TASKS** 

GMAIL: youngdevinterns60@gmail.com

WEBSITE: https://young-dev-interns.github.io/devinterns/

FACEBOOK-PAGE: youngdev interns



### **ABOUT THE INTERNSHIP**

### **Internship Details:**

Internship Start Date: October 20, 2023
Internship End Date: November 20, 2023

**Duration:** I month, **Location:** Remote

### **Benefits of this internship:**

Exposure to real-world projects and industry-standard tools Guidance from experienced professionals.

A supportive and collaborative work environment.

Opportunity to build a portfolio of your work.

Certificate of completion at the end of the internship

NOTE: DO NOT DO THE TASKS OF ALL 3 LEVELS, DO WHAT YOUR LEVEL IS IF APPLIED FOR EXPERT YOU HAVE THE CHOICE IF FOR INTERMEDIATE ALSO YOU HAVE CHOICE.

## TO DO LIST BEGINNER LEVEL USING PYTHON

- Data Exploration with Pandas:
- Load a dataset using Pandas.
- Display basic statistics (mean, median, etc.) for numerical columns.
- Count unique values in a categorical column.
- Data Visualization with Matplotlib/Seaborn:
- Create a histogram to visualize the distribution of a numerical variable.
- Plot a bar chart to show the frequency of categories in a categorical variable.
- Create a scatter plot to visualize the relationship between two numerical variables.
- Data Aggregation and Grouping:
- Group data by a categorical variable and calculate the mean, median, or other statistics for each group.
- Aggregate data on a time series dataset by daily, weekly, or monthly averages.
- NOTE: DO ATLEAST 2 TASKS TO PASS THE INTERNSHIP AND FOR GETTING A COMPLETEION CERTIFICATE THE TASK WILL NOT BE CONSIDERED IF IT
  IS NOT POSTED ON LINKEDIN PROFILE MENTIONING COMAPANY NAME @YOUNGDEV INTERNS

## TO DO LIST INTERMEDIATE USING PYTHON

#### Exploratory Data Analysis (EDA):

Conduct in-depth EDA on a dataset, including identifying and handling missing values, outliers, and data anomalies.

Create various visualizations like histograms, box plots, and heatmaps to understand the distribution and relationships within the data.

#### Data Preprocessing:

Perform data cleaning tasks, such as standardizing column names, encoding categorical variables, and transforming numerical data.

Merge or join multiple datasets together based on common columns.

#### Time Series Analysis:

Analyze time series data, including trend and seasonality decomposition.

Forecast future values using time series forecasting methods.

NOTE: DO ATLEAST 2 TASKS TO PASS THE INTERNSHIP AND FOR GETTING A COMPLETEION CERTIFICATE THE TASK WILL
 NOT BE CONSIDERED IF IT IS NOT POSTED ON LINKEDIN PROFILE MENTIONING COMAPANY NAME @YOUNGDEV INTERNS

### TO DO LIST EXPERT LEVEL USING PYTHON

#### Deep Learning for Image Classification:

Build and fine-tune convolutional neural networks (CNNs) for image classification tasks using frameworks like TensorFlow or PyTorch. Explore advanced architectures like transfer learning with pre-trained models and conduct hyperparameter tuning.

#### Natural Language Processing (NLP) Projects:

Develop advanced NLP models for tasks like machine translation, text summarization, or language generation.

Work with transformer-based models like BERT or GPT-3.

#### Time Series Forecasting at Scale:

Build large-scale time series forecasting models for industries like finance, energy, or demand forecasting.

Implement distributed computing with technologies like Dask or Apache Spark.

#### Recommendation Systems:

Create personalized recommendation systems using collaborative filtering or content-based approaches.

Explore matrix factorization or deep learning techniques for recommendations.

NOTE: DO ATLEAST 2
 TASKS TO PASS THE INTERNSHIP AND FOR GETTING A COMPLETEION CERTIFICATE THE TASK WILL NOT BE CONSIDERED
 IF IT IS NOT POSTED ON LINKEDIN PROFILE MENTIONING COMAPANY NAME @YOUNGDEV INTERNS