Social media followers prediction

PROJECT REPORT

Submitted by

SIGIRALA NAVEEN- RA2011042010086

ANUMALA SREENIVASARAGHAVAN-RA2011042010111

Under the Guidance of

Kanmani P

(Assistant Professor, Department of Data Science and Business Systems)

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ABSTRACT

There are so many social media platforms today where you will find so many content creators in so many types of fields. As a social media consumer, the number of followers you have may not be of interest to you, but as a content creator or as a businessman, the number of followers you have is important for your content for reaching more audience. So, the task of social media followers prediction is very valuable for every content creator and every business that relies on social media. So if you want to learn how to predict your social media followers for the next month, this article is for you. In this article, I will walk you through the task of social media followers prediction with machine learning using Python

DESCRIPTION

To predict the increase in the number of followers you can expect to see, you need a dataset of your social media followers that can show you the activities of people in your social media account like:

- how many people have followed you every month
- how many views results in how many followers
- how many of your followers unfollow you every month

So it is very difficult to find such a dataset among the most common social media platforms like Facebook and Instagram as these platforms do not provide any data related to your followers. So for the task of social media followers prediction with machine learning, I collected data from my social media account on, which is a social media platform for content writers, bloggers, and researchers. You can use the same process on your dataset whether you get it from Medium, Instagram, or any other social media application to predict your social media followers. For practice, you can use the same dataset that I am using.

Social Media Followers Prediction using Python

I will start the task of social media followers prediction with machine learning by importing the necessary Python libraries and the dataset that I have collected about my followers from Medium:

Data set :-
https://drive.google.com/file/d/1ZvMHm5CjGAFXXKQ2CaGfenpMYyQgZ0tn/view?usp=share_link

Importing libraries

```
from google.colab import drive
drive.mount('/content/drive')
```

```
Mounted at /content/drive
```

```
[ ] import pandas as pd
    import matplotlib.pyplot as plt
    import seaborn as sns
    import numpy as np
```

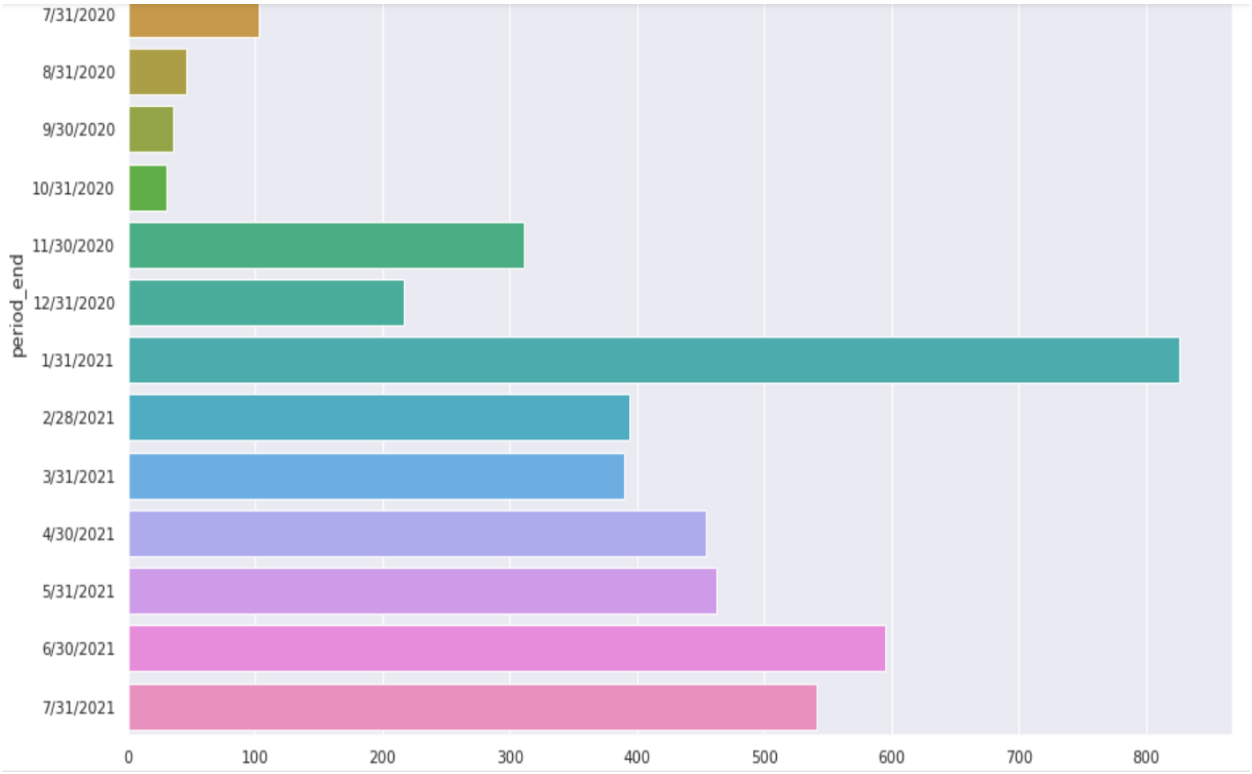
Here we will be reading the dataset which is in the csv format

```
[ ] data = pd.read_csv("/content/drive/My Drive/stats[1].csv")
    data.drop(data.tail(1).index, inplace=True)
    data.head()
```

	period_start	period_end	followers_gained	followers_lost	followers_net	followers_total	subscribers_gained	subscribers_lost	subscr
0	5/1/2020	5/31/2020	1	0	1	1	0	0	
1	6/1/2020	6/30/2020	8	0	8	9	0	0	
2	7/1/2020	7/31/2020	103	0	103	112	0	0	
3	8/1/2020	8/31/2020	46	0	46	158	0	0	
4	9/1/2020	9/30/2020	35	1	34	192	0	0	

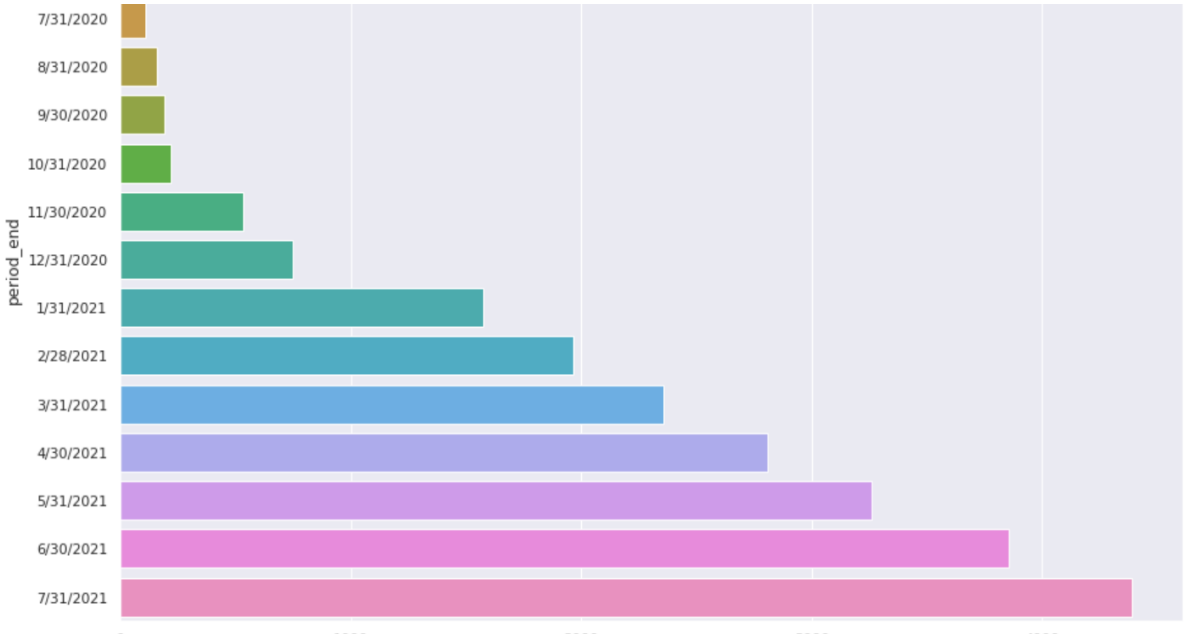
I have deleted the last row of the dataset as it contains data about this month. Now I will have a look at the number of followers that I gained every month on my account since I joined this social media platform:

```
plt.figure(figsize=(15, 10))
sns.set_theme(style="darkgrid")
plt.title("Number of Followers I Gained Every Month")
sns.barplot(x="followers_gained", y="period_end", data=data)
plt.show()
```



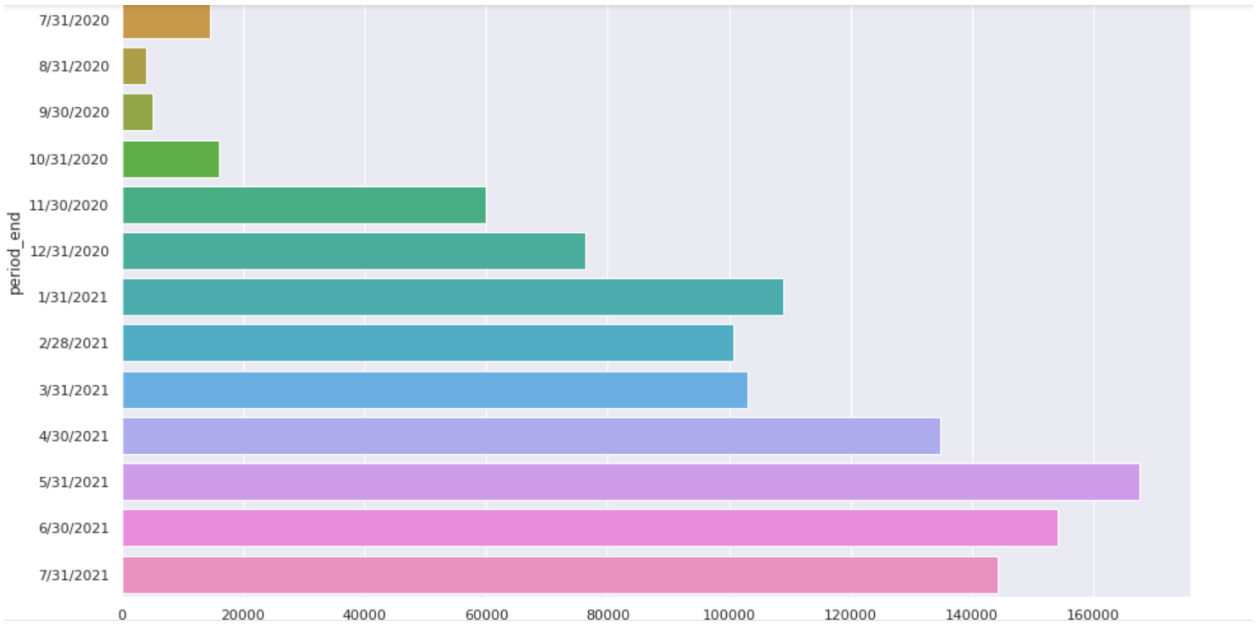
Now let’s have a look at the total number of followers I end up with every month:

```
[ ] plt.figure(figsize=(15, 10))
    sns.set_theme(style="darkgrid")
    plt.title("Total Followers At The End of Every Month")
    sns.barplot(x="followers_total", y="period_end", data=data)
    plt.show()
```



Now let's take a look at one of the most important features, which is the total number of views I get each month

```
[ ]  plt.figure(figsize=(15, 10))
     sns.set_theme(style="darkgrid")
     plt.title("Total Views Every Month")
     sns.barplot(x="views", y="period_end", data=data)
     plt.show()
```



Now I will be using the **autots** library in Python, which is one of the best data science libraries for time series forecasting. If you have never used this library before, you can easily install it on your system using the pip command:

pip install autots

Now here's how we can predict the increase in the number of followers we can expect to see over the next four months:

```python
from autots import AutoTS
model = AutoTS(forecast_length=4, frequency='infer', ensemble='simple')
model = model.fit(data, date_col='period_end', value_col='followers_gained', id_col=None)
prediction = model.predict()
forecast = prediction.forecast
print(forecast)
```

ocial media5.py hosted with ❤ by GitHub

```
            followers_gained
2021-08-31        693.465876
2021-09-30        617.750000
2021-10-31        650.000000
2021-11-30        634.750000
```

SUMMARY

So this is how you can predict the increase in the number of your followers on any social media platform. As a social media consumer, the number of followers you have may not be of interest to you, but as a content creator or as a businessman, the number of followers you have is important for your content for reaching more audience. I hope you liked this article on the task of social media followers prediction with machine learning using Python.