prefilter

January 31, 2021

[1]:
```
import matplotlib.pyplot as plt
import pandas as pd
df = pd.read_csv("500rate.csv")
df.head()
```

[1]:

	RecvTime	oldRecvTime	SendTime	oldSendTime
0	52437	52437	52204	52189
1	52437	52437	52204	52204
2	52437	52437	52204	52204
3	52437	52437	52204	52204
4	52437	52437	52204	52204

[2]:
```
d = df["RecvTime"] - df["oldRecvTime"] - (df["SendTime"] - df["oldSendTime"])
df['diff']= d
df.head()
```

[2]:

	RecvTime	oldRecvTime	SendTime	oldSendTime	diff
0	52437	52437	52204	52189	-15
1	52437	52437	52204	52204	0
2	52437	52437	52204	52204	0
3	52437	52437	52204	52204	0
4	52437	52437	52204	52204	0

[3]:
```
preFilterDF = { "RecvTime": [],
                "oldRecvTime":[],
                "SendTime":[],
                "oldSendTime":[],
                "diff":[]}
```

[4]:
```
tR = df["RecvTime"][0]
#print(abs(tR - tR -2))
for index,line in df.iterrows():
    curR = int(line["RecvTime"])
    diff = int(line["diff"])
    if ( (abs(curR - tR) >= 5) or (diff < 0) ):
        tR = curR
```

```
        preFilterDF["RecvTime"].append(line["RecvTime"])
        preFilterDF["oldRecvTime"].append(line["oldRecvTime"])
        preFilterDF["SendTime"].append(line["SendTime"])
        preFilterDF["oldSendTime"].append(line["oldSendTime"])
        preFilterDF["diff"].append(line["diff"])
```

[5]:
```
preFilter = pd.DataFrame(preFilterDF)
```

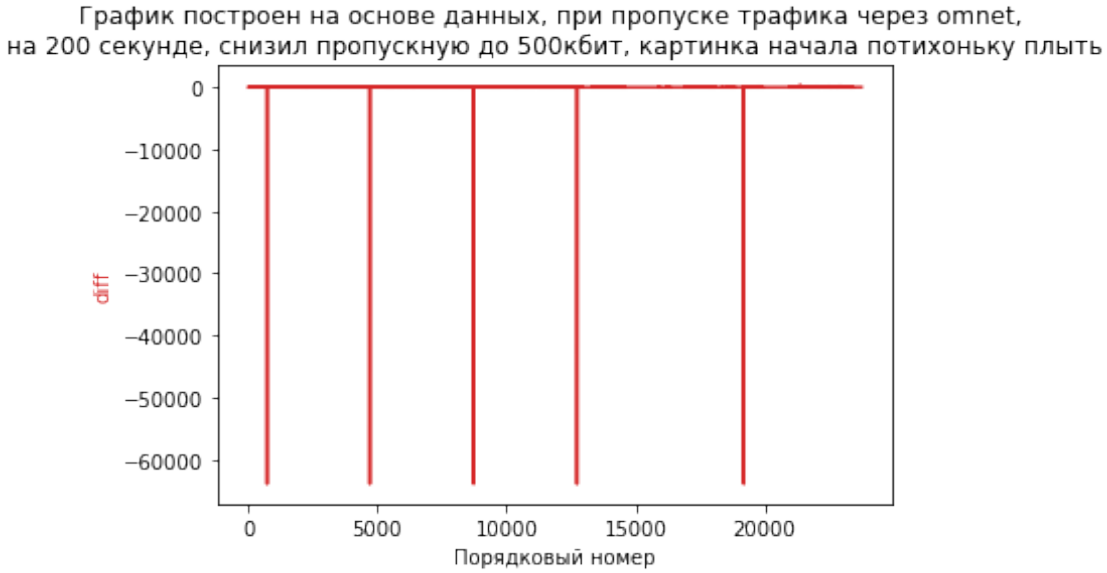
[6]:
```
preFilter.head()
```

[6]:

	RecvTime	oldRecvTime	SendTime	oldSendTime	diff
0	52437	52437	52204	52189	-15
1	52437	52437	52219	52204	-15
2	52437	52437	52236	52219	-17
3	52437	52437	52255	52236	-19
4	52437	52437	52268	52255	-13

[7]:
```
fig, ax1 = plt.subplots()

color = 'tab:red'
ax1.set_xlabel('          ')
ax1.set_ylabel('diff', color=color)  # we already handled the x-label with ax1
ax1.plot(preFilter["diff"],color=color)
plt.title("""                    ,                  omnet,
  200     ,              500   ,                    """)
plt.show()
```



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