Repolink: [nirajan3477/labtest12 (github.com)]

Odd

```
import numpy as np
import matplotlib.pyplot as plt
from scipy.signal import butter, filtfilt
np.random.seed(0)
aqi= np.random.normal(50, 100, 1440)
def low(data, cutoff, fs, order=5):
    nyq = 0.5 * fs
    normal_cutoff = cutoff / nyq
    b, a = butter(order, normal_cutoff, btype='low', analog=False)
    y = filtfilt(b, a, data)
    return y
saqi = low(aqi, cutoff=0.03, fs=2)
havg= np.mean(saqi.reshape(-1, 60), axis=1)
plt.plot(aqi, label='noise')
plt.plot(saqi, label='Smoothed', color='orange')
plt.plot(np.arange(0, 1440, 60), havg, marker='o', label='Hourly avg',
color='red')
plt.show()
```

Output:

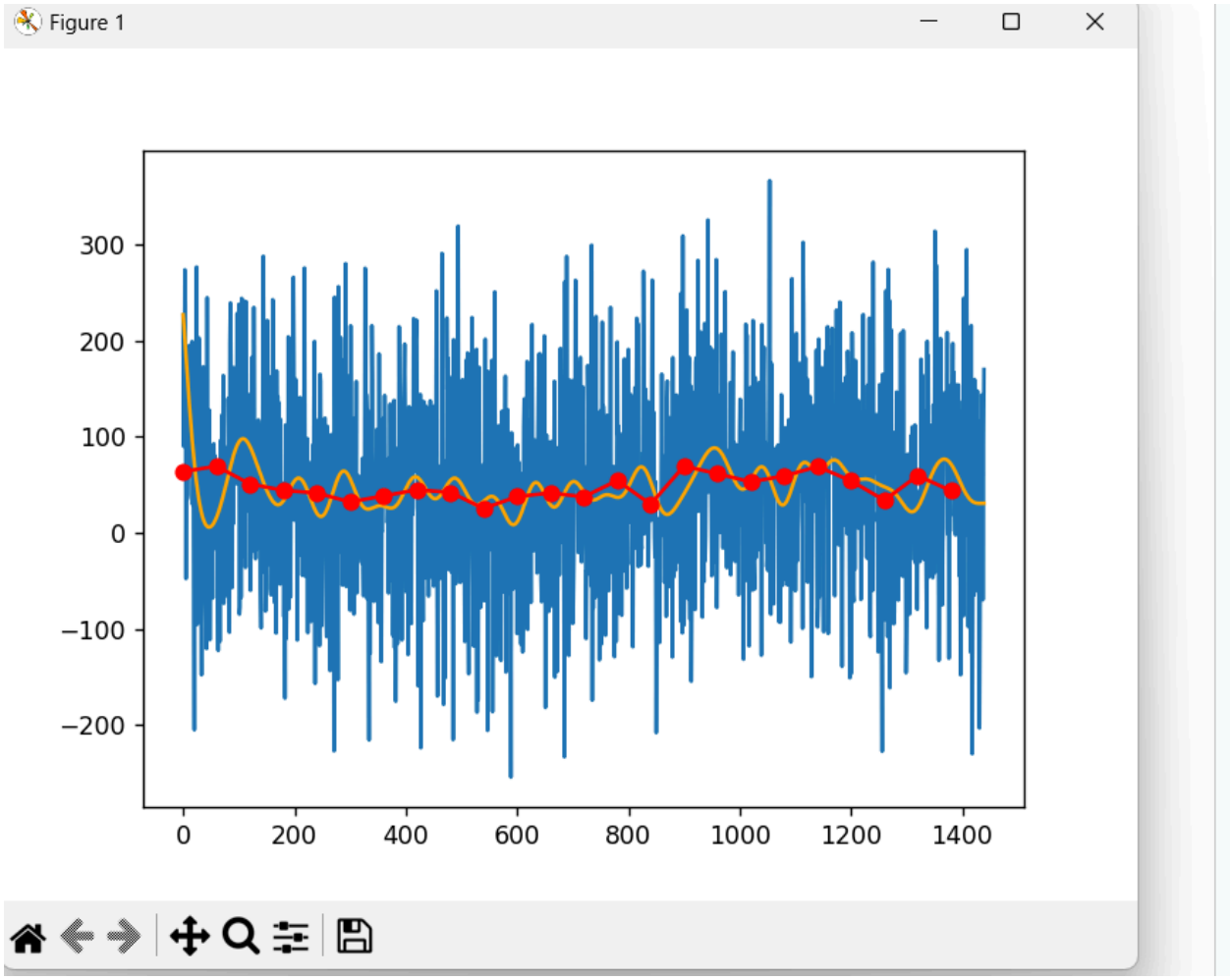
Figure 1
300
200
100
0
−100
−200
0
200
400
600
800
1000
1200
1400