

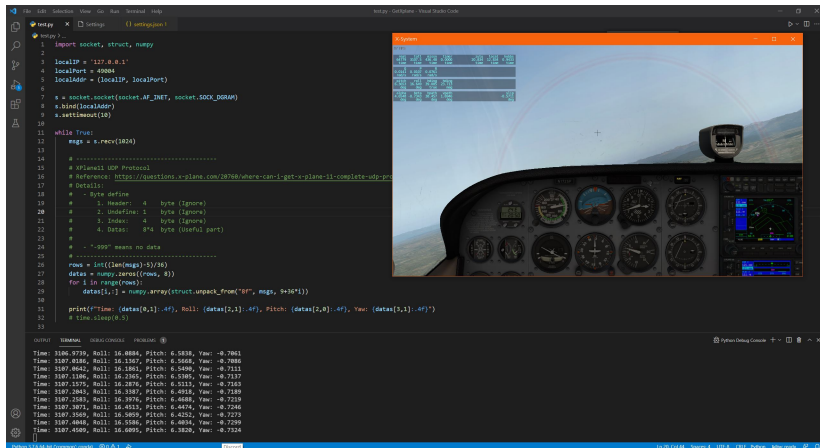
Meeting

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Progress report

- Get the data from XPlane123



```
1 import socket, struct, numpy
2
3 localIP = '127.0.0.1'
4 localPort = 49004
5 localAddr = (localIP, localPort)
6
7 s = socket.socket(socket.AF_INET, socket.SOCK_DGRAM)
8 s.bind(localAddr)
9 s.settimeout(10)
10
11 while True:
12     mgs = s.recv(1024)
13
14     # -----
15     # XPlane11 UDP Protocol
16     # Reference: https://questions.x-plane.com/28768/where-can-i-get-x-plane-11-complete-udp-protocol
17     # Details:
18     # - byte define
19     #   1. Header: 4 byte (Ignore)
20     #   2. Undefined: 1 byte (Ignore)
21     #   3. Index: 4 byte (Ignore)
22     #   4. Data: 8*4 byte (Useful part)
23
24     # - "-999" means no data
25     # -----
26     rows = int((len(mgs)-5)/36)
27     datas = numpy.zeros((rows, 8))
28     for i in range(rows):
29         datas[i,:] = numpy.array(struct.unpack_from("8f", mgs, 9+36*i))
30
31     print("Time: {datas[0,i]:.4f}, Roll: {datas[2,i]:.4f}, Pitch: {datas[3,i]:.4f}, Yaw: {datas[4,i]:.4f}")
32     s.time.sleep(0.1)
33
```

OUTPUT

Time	Roll	Pitch	Yaw
1106.9779	16.8884	6.5838	-0.7061
1107.0186	16.1367	6.5668	-0.7086
1107.0642	16.1861	6.5498	-0.7111
1107.1106	16.2365	6.5305	-0.7137
1107.1575	16.2876	6.5113	-0.7163
1107.2043	16.3387	6.4918	-0.7189
1107.2583	16.3976	6.4688	-0.7219
1107.3071	16.4513	6.4474	-0.7246
1107.3569	16.5059	6.4252	-0.7273
1107.4048	16.5586	6.4036	-0.7299
1107.4509	16.6095	6.3820	-0.7324

Figure 1: Connect result

- Simplify the program.
- Review the basic knowledge for ML.