

一个湘大校园自动打卡的程序。思路是很明确的，因为湘大校园健康打卡的本质就是一个表单的提交，这个表单数据在客户端和服务端之间的交互方式必然是通过 **HTTP**。那么我的思路是，通过 **python** 里面爬虫相关的库来模拟这个交互过程。还有一种思路是使用点击精灵或者是 **autojs** 来模拟点击。

实现自动打卡，大致分为如下几步：

1. 抓包。这一步获取接口地址、鉴权方式、参数等。😄如果这个打卡是一个网页多好，直接 **F12** 抓包舒服得一批。试了 **Burp**、**Fiddler** 等抓包工具，都没有用.....
2. 编写函数模拟请求
3. 定期执行第二步编写的函数
 1. 云函数实现
 2. **linux** 定时服务实现

H2 抓包

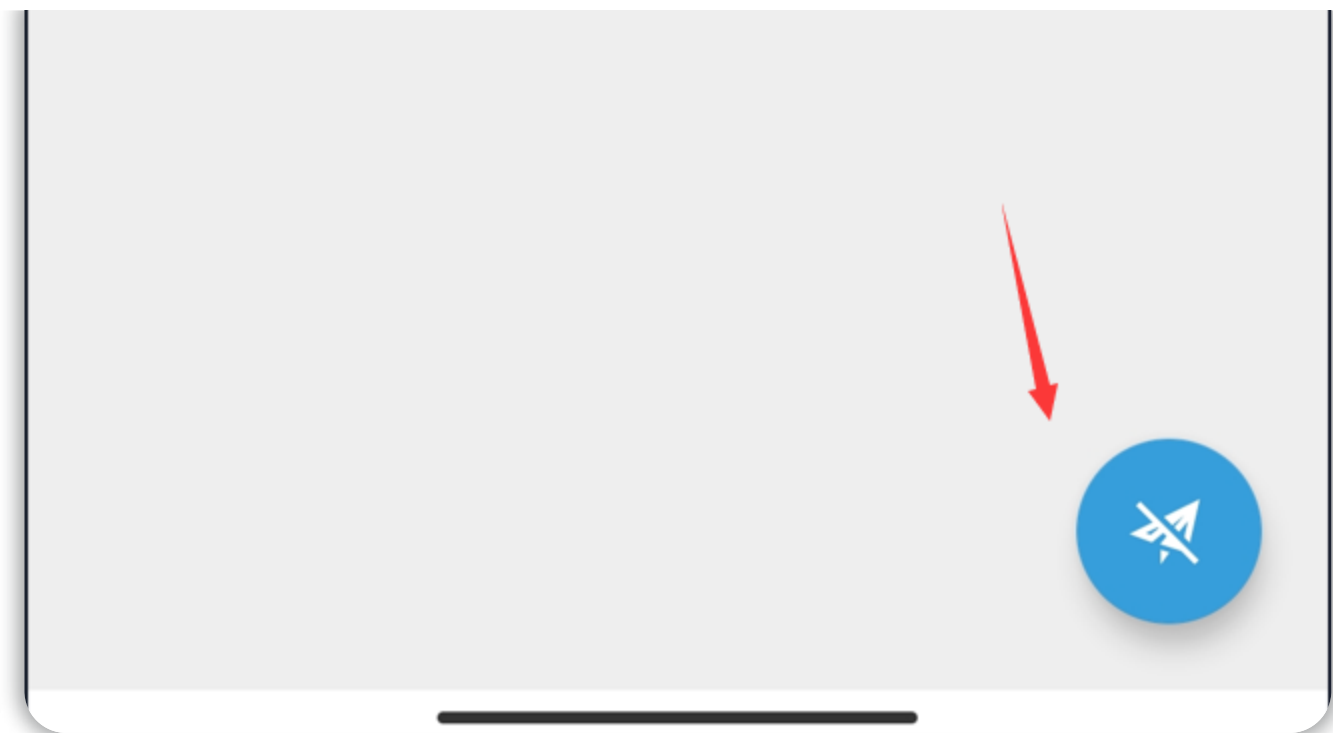
首先，你需要安装一个小黄鸟软件。

[百度网盘下载](#)

打开安装好的软件，点击右下角那个蓝色的东东，安装一下CA证书。（出现的一切弹框都选确定就行了）



点击右下角按钮开始抓包



这个时候，退出黄色的这个软件，打开湘大校园，进入如下页面，这个时候先不提交（一定要先打开湘大校园，不然会被检测抓包，直接进不去软件）



湘大e卡

近14天是否接触过疫情高发区人群 否 >

是否与确诊(疑似)患者接触 否 >

本人湖南省电子健康码状态 绿码 >

目前状态 正常 >

家属状态 正常 >

出现的症状(可多选) 自觉正常 >

离开居住地或工作地(当日) 否 >

返回居住地或工作地(当日) 否 >

是否接种疫苗 是 >

疫苗类型 重组疫苗 >

接种针次 第三针 >

今日体温(摄氏

度)

36.9

备注

更多交通信息请在此补充

提交

然后回到黄色的软件，点击蓝色的按钮，开始抓包（同样，所有的弹框都选择确定）



未知应用

03:23:07

POST https://techain.baidu.com/p/1/r/120/60000...

请求中

0.98 kB



未知应用

03:23:08

POST https://cmgate.vip.qq.com/sdk/get-flow-c...

请求中

442 B



未知应用

03:23:07

POST https://tcbox.baidu.com/ztbox?action=zub...

请求中

770 B



未知应用

03:23:07

POST https://tcbox.baidu.com/ztbox?action=zub...

请求中

1.60 kB



未知应用

03:23:07

GET https://techain.baidu.com/srcmon

请求中

335 B



进入湘大校园，提交健康打卡。然后，又回到小黄鸟，此时，抓包已经完成了。找到下图这一条数据，点击进去。现在需要拿到两个数据，一个是cookie，这个让服务端知道你是谁，一个是表单数据的json，这两个都要复制下来，替换到后面的代码中。



未知应用

03:23:37

GET http://access.speech.ai.xiaomi.com/speech/...

101 Switching Protocols

32.75 kB



未知应用

03:23:37

GET http://access.speech.ai.xiaomi.com/speech/...

101 Switching Protocols

4.35 kB



未知应用

03:23:26

GET https://touch.ccb.com/ga.gif?eid=bb7e0ab9...

200

1.43 kB



未知应用

03:23:20

POST https://app.xiaoyuan.ccb.com/channelMan...

200

1.55 kB



未知应用

03:23:20

POST https://app.xiaoyuan.ccb.com/LHECISM/B2...

200 OK

2.44 kB



未知应用

03:23:20

POST https://app.xiaoyuan.ccb.com/LHECISM/B2...

200 OK

2.01 kB



未知应用

03:23:20

POST https://app.xiaoyuan.ccb.com/LHECISM/B2...

200 OK

2.14 kB



未知应用

03:23:18

POST https://app.xiaoyuan.ccb.com/channelMan...

200

2.50 kB



未知应用

03:23:17

GET https://pan.baidu.com/rest/2.0/pcs/adx?m=t...

200 OK

1.35 kB



未知应用

GET https://pan.baidu.com/api/singkil/bind?... ?...

200 OK

2.28 kB



第一步，复制cookie



抓包内容



总览

请求

响应

Connection: keep-alive

Content-Length: 1175

Accept: application/json, text/plain, */*

User-Agent: Mozilla/5.0 (Linux; Android 10; MI 9 Build/QKQ1.190825.002; wv) AppleWebKit/537.36 (KHTML, like Gecko) Version/4.0 Chrome/102.0.5005.125 Mobile Safari/537.36jianronghuixue/1.3.0

Content-Type: application/json;charset=UTF-8

Origin: https://app.xiaoyuan.ccb.com

X-Requested-With: com.ccb.xiangdaxiaoyuan

Sec-Fetch-Site: same-origin

Sec-Fetch-Mode: cors

Sec-Fetch-Dest: empty

Referer: https://app.xiaoyuan.ccb.com/EMTSTATIC/DZK2022092301/index2022092301.html

Accept-Encoding: gzip, deflate

Accept-Language:

zh-CN,zh;q=0.9,en-US;q=0.8,en;q=0.7

Cooki: IN047=47001|YxgSs; IN031=31002|YymhM;

sid=6055cf31-34f4-4887-89cd-8782b74aff9a;

tgw_l7_route=2b1ef40df8044df44668a2d86affb739;

IN010=10003|YzdCF; IN001=1003|YzdCF

Headers

Text

Hex

Raw

预览

第二步，复制json



抓包内容



总览

请求

响应

```
{
  "stuClass": "9999",
  "schoolId": "10530",
  "schoolName": "湘潭大学",
  "stId": "202005710517",
  "userId": "A3231002159826522854162504",
  "stName": "王石鑫",
  "locationAddr": "湖南省湘潭市雨湖区",
  "id": "E9E45CDB472782C1E0539349FD0A69C5",
  "departments": "",
  "isContact": "N",
  "isFever": "0",
  "isWuhan": "N",
  "nowArea": "湖南省湘潭市雨湖区",
  "familyaddress": "湘潭大学",
  "familyStatus": "0",
  "diagnosisTreatment": "",
  "nowStatus": "0",
  "healthStatus": "3",
  "isLevel": "N",
  "isbackLive": "N",
  "trafficTool": "",
  "backTrafficTool": "",
  "levelDate": "",
  "backtime": "",
  "arriveAddr": ""
}
```


json

```
"trafficNo": "",
"backTrafficNo": "",
"professional": "",
"personType": "",
"personCategory": null,
"temperature": 36.9,
"remarks": null,
"timeToLeaveHuBei": "",
"dateOfDisengagement": ""
```

Headers

Text

Hex

Raw

预览

H2 代码

```
from email import header
import requests
import json

def autoClockin():
    headers = {
        'Host': 'app.xiaoyuan.ccb.com',
        'Connection': 'keep-alive',
        'Content-Length': '1185',
        'Accept': 'application/json, text/plain, */*',
        'User-Agent': 'Mozilla/5.0 (Linux; Android 10; YAL-AL10 Build/HUAWEIYAL-AL10; wv) AppleWebKit/537.36 (KHTML, like Gecko) Version/4.0 Chrome/86.0.4240.185 Mobile Safari/537.36jianronghuixue/1.2.2',
        'Content-Type': 'application/json;charset=UTF-8',
        'Origin': 'https://app.xiaoyuan.ccb.com',
        'X-Requested-With': 'com.ccb.xiangdaxiaoyuan',
        'Sec-Fetch-Site': 'same-origin',
        'Sec-Fetch-Mode': 'cors',
        'Sec-Fetch-Dest': 'empty',
        'Referer': 'https://app.xiaoyuan.ccb.com/LHECRESM/DZK/index2020110601.html',
        'Accept-Encoding': 'gzip, deflate',
        'Accept-Language': 'zh-CN,zh;q=0.9,en-CN;q=0.8,en-US;q=0.7,en;q=0.6',
        'Cookie': 'IN047=47001|YxgSs; IN031=31002|YymhM; sid=6055cf31-34f4-4887-89cd-8782b74aff9a; tgw_l7_route=d73149ab3f086e8d0cf04b5f79c1bd9e; IN001=1006|Yzc50; IN010=10003|Yzc50' #用你复制的cookie, 替换掉冒号后面的内容
    }
```

#用你复制的json，替换掉=后面的内容

```
data = {  
    "stuClass": "9999",  
    "schoolId": "10530",  
    "schoolName": "湘潭大学",  
    "stId": "202005710517",  
    "userId": "A3231002159826522854162504",  
    "stName": "王石鑫",  
    "locationAddr": "湖南省湘潭市雨湖区",  
    "id": "E9E2C53F48539674E0539349FD0A3028",  
    "departments": "",  
    "isContact": "N",  
    "isFever": "0",  
    "isWuhan": "N",  
    "nowArea": "湖南省湘潭市雨湖区",  
    "familyaddress": "湘潭大学",  
    "familyStatus": "0",  
    "diagnosisTreatment": "",  
    "nowStatus": "0",  
    "healthStatus": "3",  
    "isLevel": "N",  
    "isbackLive": "N",  
    "trafficTool": "",  
    "backTrafficTool": "",  
    "levelDate": "",  
    "backtime": "",  
    "arriveAddr": "",  
    "trafficNo": "",  
    "backTrafficNo": "",  
    "professional": "",  
    "personType": "",  
    "personCategory": None,  
    "temperature": 36.9,  
    "remarks": None,  
    "timeToLeaveHuBei": "",  
    "dateOfDisengagement": "",  
    "otherSymptoms": "",  
    "nowStatusStartTime": "",  
    "familyStatusStartTime": "",  
    "feverStartTime": "",  
    "coughStartTime": "",  
    "fatigueStartTime": "",  
    "diarrheaStartTime": "",  
    "coldStartTime": "",  
    "headacheStartTime": "",  
    "noseStartTime": "",  
    "runnyStartTime": "",  
    "throatStartTime": "",  
    "conjunctivaStartTime": "",  
}
```

```
"isAppearDiagnosis": "N",
"isVaccinate": "1",
"vaccineType": "2",
"injectTimes": "3",
"otherDesc": None,
"isContactWithDiagnosis": "N",
"isInSchool": "",
"stMobile": "17377966179"
}

url = 'https://app.xiaoyuan.ccb.com/channelManage/outbreak/addOutbreak'
res = requests.post(url=url, headers=headers, data=json.dumps(data))
print(res.json())

autoClockin()
```

H2 云函数或者定时任务

1. 腾讯云有对python云函数的支持，百度一下就能找到教程
2. 我用的是centos发行版linux，所以可以用crontab做定时任务

云函数

定时任务