CensorshipInvestigation

November 15, 2018

1 Censorship Investigation

Proposed solutions and test for blocked WeChat message and surveys.

1.1 What's here

- [X] wxpy multiple bots at once
- [X] Quatrics Speed
- [X] links without sensitive keywords
- [X] links with sensitive keywords
- [ ] Google Voice registered WeChat account

1.2 Resources

- GreatFire Analyzer: censorship analyzer for url, keywords etc.
- List of Baidu censored words (will return "Not Found").

1.3 WeChat

1.3.1 Setup and Manage Multi Accounts

- Register with Google Voice US numbers
- 0 cost, but needs to make phone calls and texts every week to prevent from being canceled
- might not pass WeChat check
- Multiple login with Python ThreadPool to prevent overload
- (See code below)

```
In [ ]: # Python ThreadPool to login multiple accounts at once
        from multiprocessing.pool import ThreadPool
        from wxpy import *

        cache_paths = ['bot1.pkl', 'bot2.pkl']

        with ThreadPool(2) as pool:
            bot1, bot2 = pool.map(lambda x: Bot(x, qr_path='{}.png'.format(x)), cache_paths)
```

1.3.2 Censorship at server

- Choose a usable encryption
- Encoperate with the wxpy API

1.4 Surveys

Option 1: use Quatrics

- speed test on WebSitePulse using self-created Qualtrics form

Tested From	Shanghai, China	Beijing, China
Status	OK	OK
Response Time	6.038 sec	0.803 sec

- when using a longer form

Tested From	Shanghai, China	Beijing, China
Status	OK	OK
Response Time	5.583 sec	6.446 sec

Option 1: use Chinese survey website wjc
Option 3: use vultr or bluehost for web hosting

```
In [6]: # cvs + python API demo: display content of test.cvs
        import csv
        with open('testSensitive.csv', newline='', mode='r') as inputFile:
            inputReader = csv.DictReader(inputFile)
        #     next(input_reader, None) # skip the headers in cvs.reader(input) mode
            for row in inputReader:
                print('From: ' + row['From'])
                print('To: ' + row['To'])
                print('Message: ' + row['Msg'])
```

```
From: liz
To: filehelper
Message: https://www.google.com/search?ei=VpXtW6zBAojL_QbWlJSADw&q=%E9%87%91%E4%B8%89%E8%83%96
From: liz
To: filehelper
Message: https://www.baidu.com/s?wd=%E9%87%91%E4%B8%89%E8%83%96&rsv_spt=1&rsv_iqid=0xe553db3a0
From: liz
To: b83120371
Message: https://www.baidu.com/s?wd=6.4&rsv_spt=1&rsv_iqid=0xd460cf2400004c96&issp=1&f=8&rsv_bp
From: liz
To: luv
```

```
Message: https://www.baidu.com/s?wd=%E6%B3%95%E8%BD%AE%E5%8A%9F&rsv_spt=1&rsv_iqid=0xd460cf240
From: liz
To: Tiffany
Message: test3
From: liz
To:
Message: https://www.baidu.com/s?wd=%E9%80%80%E5%85%9A&rsv_spt=1&rsv_iqid=0xd460cf2400004c96&is
From: liz
To:
Message: https://www.baidu.com/s?wd=%E8%BF%9E%E4%BB%BB&rsv_spt=1&rsv_iqid=0xd460cf2400004c96&is
From: liz
To: Sherry Zhang
Message: https://www.baidu.com/s?wd=89&rsv_spt=1&rsv_iqid=0xd460cf2400004c96&issp=1&f=8&rsv_bp=
```

```
In [7]: # demo for using csv with itchat
        import csv
        import itchat

        itchat.auto_login(hotReload=True)

        with open('testSensitive.csv', newline='', mode='r') as inputFile:
            inputReader = csv.DictReader(inputFile)

            for row in inputReader:
        #         itchat.send((row['Msg']), toUserName=(row['To']))
                receiverUserName = (row['To'])
                msg = (row['Msg'])
                itchat.send(msg, toUserName=receiverUserName)
                print('Sent!')
```

```
Sent!
Sent!
Sent!
Sent!
Sent!
Sent!
Sent!
Sent!
```