# test\_speed1.py (Andi Klein)

Test\_speed1.py runs on Mac and Linux but **not** Windows. It should not be difficult to get it to run on Windows; so feel free to port it.

In order to install all necessary packages you will need to

1. Install the speedtest CLI from <https://www.speedtest.net/apps/cli>
2. Once installed you need to run it once to accept the license
3. **pip install dropbox**
4. **pip install pycryptodome**
5. Mac: **brew install git**, Linux it is usually supplied, otherwise **sudo apt get install git ,** or **yum install git**
6. **mkdir ~/speedfiles** (below your home directory)
7. **mkdir git**
8. **cd git**
9. **git clone** [**https://github.com/pabloemma/speedtest.git**](https://github.com/pabloemma/speedtest.git) **speedtest** (this you **only** do once, after this your command will be **git pull** , which will update you to the latest version)
10. You will need a dropbox account and setup an app. If you have a dropbox account, log in and then go to <https://www.dropbox.com/developers/documentation>, click on “App console” in the upper right corner and create a new app. There click on permission type and select which one you want. Once you generated the app, click on the button **Generate** under “Generated Access Token “
11. Copy into clipboard the Access token, which is very long
12. open the file **LCWA\_d.txt** in your speedtest directory, remove the line and paste your access token.
13. On dropbox also create a folder called “LCWA”, this is where the files will go.
14. If you like an acoustic signal telling you the program has started install **espeak,** which you can do by either
    1. brew install espeak
    2. sudo yum install espeak
    3. sudo apt install espeak

Now you should be ready to run.

**./test\_speed1.py –h** gives you a little help and shows you the valid switches

**./test\_speed1.py –L** lists all the nearest speedtest servers. By default it takes CyberMesa

A typical example to run would be

**./test\_speed1.py –t 10 –d LCWA\_d.txt –s 9686**

This would run a speedtest every 10 minutes, using the authorization file LCWA\_d.txt for dropbox and server from NMSURF. If you don’t give the –d switch, your data will be locally stored in ~/speedfiles with the name **2020-02-13speedfile.csv** (this one if for data taken on Feb 13 2020; you get the picture). Always at midnight a new file is created.

You can plot the data using excel, or your own program. The data format is a **csv** file, with the first line giving you the name of the column, and from then on all data.