HOW TO INSTALL PYTHON AND HIS PACKAGES

PRELIMINARY PARAGRAPH (only for macOS users)

First, I suggest to install "Macs Fan Control" and set the fan speed between 4.000 and 5.000 rpm.

- 1. Download and install the OS X hosts Virtual Box v. 6.1.16 from this link: https://www.virtualbox.org/wiki/Download_Old_Builds_6_1 (other versions have some bugs with macOS microphone);
- 2. Download and install the "Extension Pack" for 6.1.16;
- 3. Now install virtual box (pay attention at "Security e Privacy" option in macOS preferences);
- 4. Download Windows 10 iso files: https://www.microsoft.com/it-it/software-download/windows10ISO;
- 5. From Virtual Box create new VDI machine (I recommend at least 4096 GB of ram, then check "Create instantly a new rigid disk" and choose VDI option);
- 6. Before starting the machine, go to options and set:
 - A. From System —> processor, select at least two processor if you have those;
 - B. From Screen change Video Memory value;
 - C. From Audio enable "Audio input" and "Audio output";
 - D. From Ethernet set "NAT";
 - E. From Share Folder, you can set any default folder (this folder can be read by your macOS and Windows);
 - F. From USB you can add any flash drivers or USB microphone;
 - G. From Storage, go to "Empty" and then click on Disk Image and add the ISO file.
- 7. If you have some kernel problems when you start the machine, follow this link: https://apple.stackexchange.com/questions/408154/macos-big-sur-virtualbox-error-the-virtual-machine-has-terminated-unexpectedly-d;
- 8. Install Windows 10 Pro;
- 9. For Full Screen go to Device —> Insert Guest Additions CD image... Then install it and reboot the system;

DOWNLOAD AND INSTALL PYTHON ON WINDOWS

- 1. Download and install python: https://www.python.org/downloads/ (when you install python, please see where it will be installed; in my case "C:\Users\...\AppData\Local\Programs\Python\Python39");
- 2. From cmd, go to your folder and type "python -version" and "pip -version". Are they install?
- 3. Download and install git: https://git-scm.com/downloads;
- 4. From that folder, install your packages with "python -m" Command;
- 5. For example: "python -m pip install gTTS" (you need to use pip or others to install packages);

- 6. For playsound, I suggest you "python -m pip install playsound==1.2.2" (other versions have some problems). If you have a C++ 14.0 problem, go to https://visualstudio.microsoft.com/it/visual-cpp-build-tools/;
- 7. For installing pyaudio, see https://www.youtube.com/watch?v=AKymlea8sYM;
- 8. From Python IDLE verify if those packages are installed correctly (type "import ...");
- 9. For python I've used ATOM (https://atom.io);
- 10. After download and install ATOM, go to File —> Settings —> Install and type "script" (you will use it for run programs with ctrl + shift + B; ctrl is different between cmd) and "busy-signal";
- 11. From a generic folder, right click on "This PC" —> properties —> advanced properties —> environmental variables and then paste your Python Folder to PATHs (remember to set this folder at the first position);
- 12. Reboot the system.

DOWNLOAD AND INSTALL JAVA AND SEPA

- 1. Download and install java v. 1.8;
- 2. Follow this link for installing SEPA: https://github.com/arces-wot/SEPABins;
- 3. You must use java 1.8 version; for blazegraph use for example "C:\Program Files\Java\jre1.8.0 301\bin\java" -jar blazegraph.jar;
- 4. For using SEPA with python, follow: https://github.com/arces-wot/SEPA-python3-APIs;
- 5. Any further information: http://mml.arces.unibo.it/TR/jsap.html; mml.arces.unibo.it/TR/jsap.html;
- 6. If you see examples, please see the other files.