Install and Configure Arduino Software for Windows

Step 1 – Install the driver

- Click this instant URL to download directly from here:
  - For Windows 7/8:

https://www.silabs.com/documents/public/software/CP210x_Windows_Drivers.zip

  - For Windows 10:
    https://www.silabs.com/documents/public/software/CP210x_Universal_Windows_Driver.zip

  For your information, click here for the website that contains the above download link.

- The file is normally located in your Downloads directory. Right click on the CP210x_Universal_Windows_Driver.zip [Figure 1)], then click Extract All and extract it on your machine.

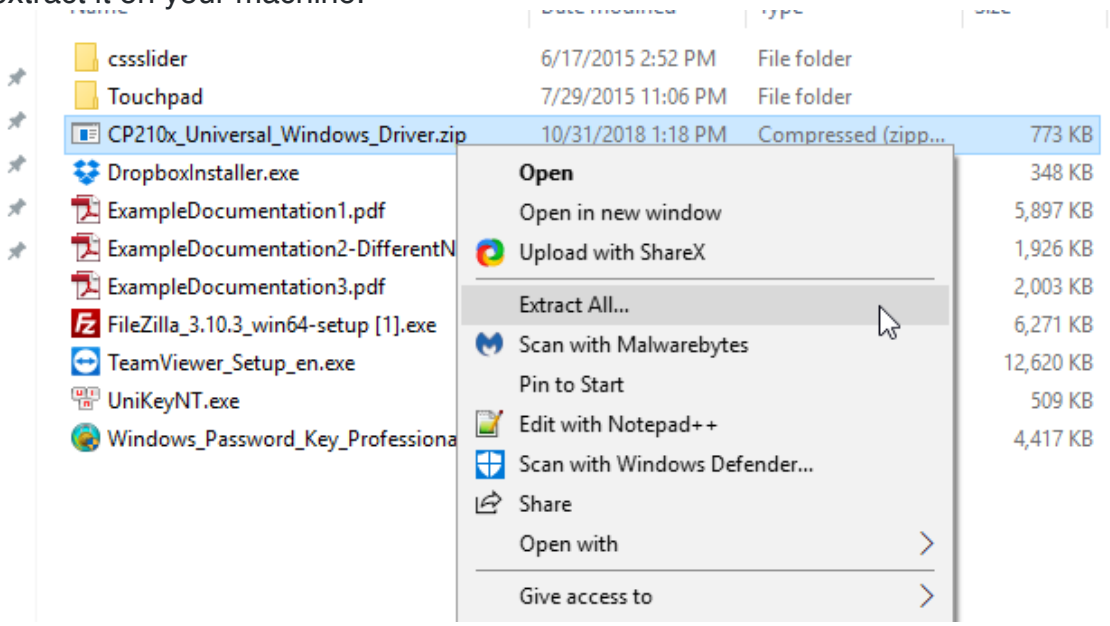

Figure 1

- Once you have extracted the zip file, a directory will popup on your screen [Figure 2]. Double click on the CP210xVCPInstaller_x64.exe . In case, If Windows ask for permission, click “Allow”, “Install” or “Yes”.

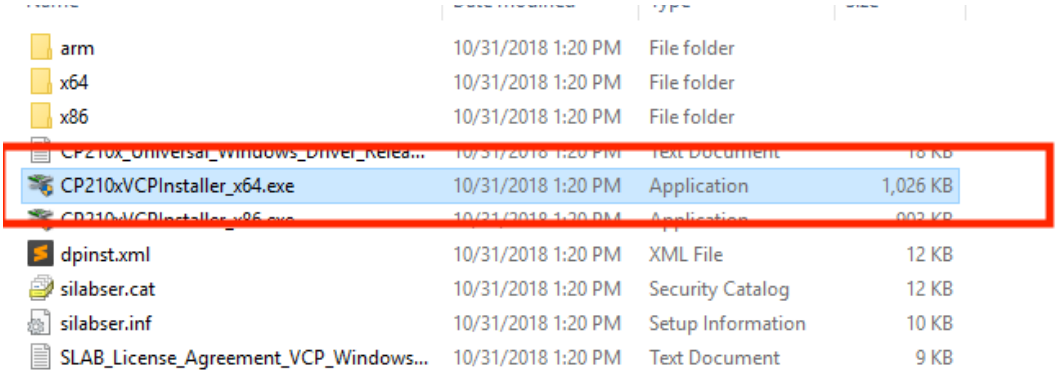

Figure 2

Step 2— Download and install the Arduino software

- Visit https://www.arduino.cc/en/Main/Software and download the Windows version of the Arduino software installer. Install the Windows version [Figure 3]

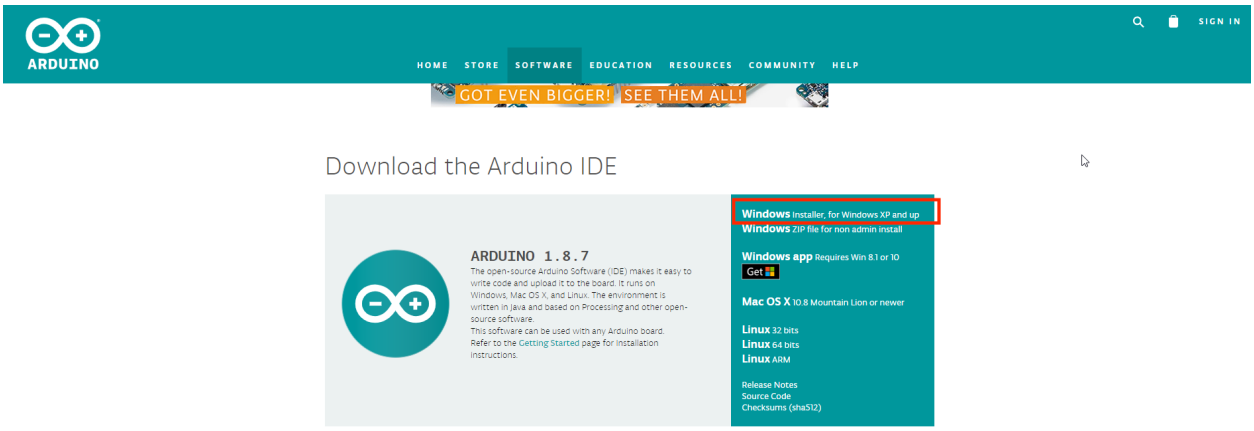

Figure 3

- Install the software per the instructions at https://www.arduino.cc/en/Guide/Windows. Skip the last section of the installation instructions, i.e. the “Proceed with board specific instructions” portion.

Step 3— Configure the Arduino Software

- Add the necessary libraries (libraries are like “drivers”) to let the Arduino software know how to communicate with the ESP32 microcontroller and components we will be using.
- To add support for the ESP32 microcontroller, click on Arduino -> Preferences [Figure 4]

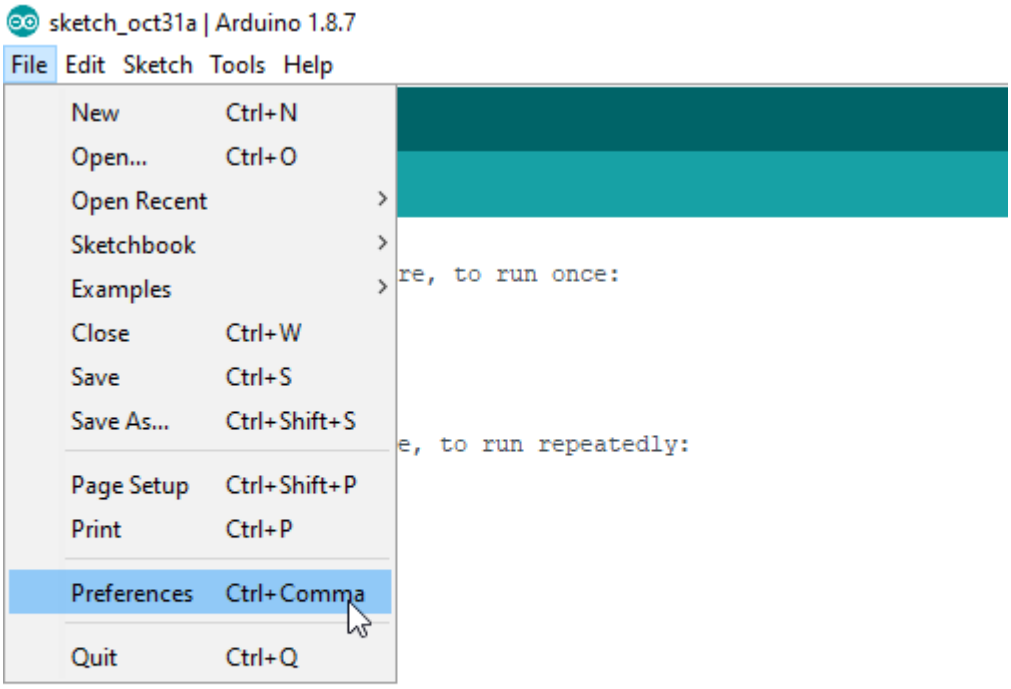

Figure 4

- Paste **https://dl.espressif.com/dl/package_esp32_index.json** into the blank space next to "Additional Boards Manager URLs:" then click "OK" to return to the main Arduino software windows [Figure 5].

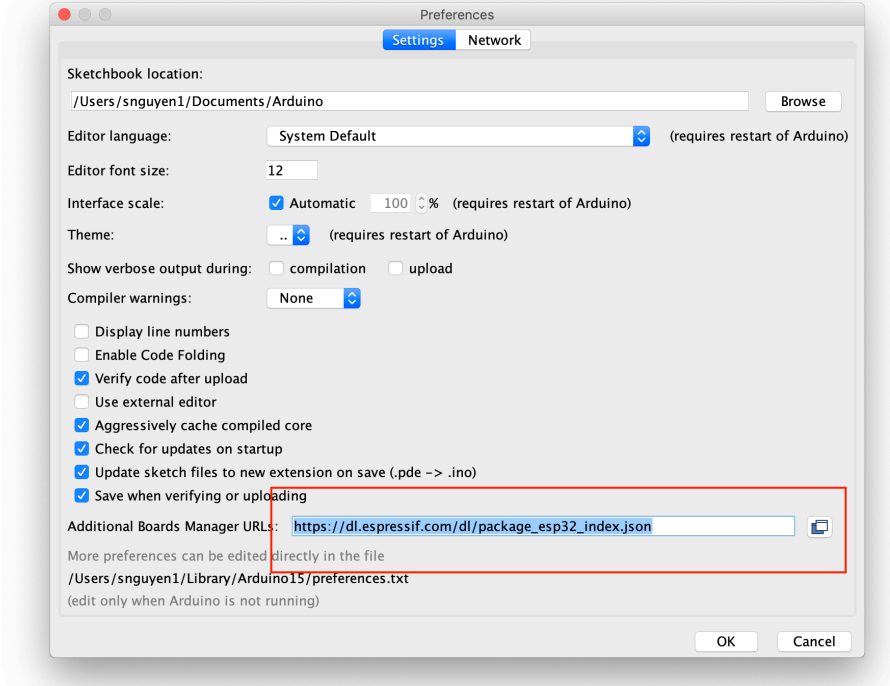

Figure 5

- Click on Tools -> Board: "Arduino/Genuino Uno" -> Boards Manager…. [Figure 6]

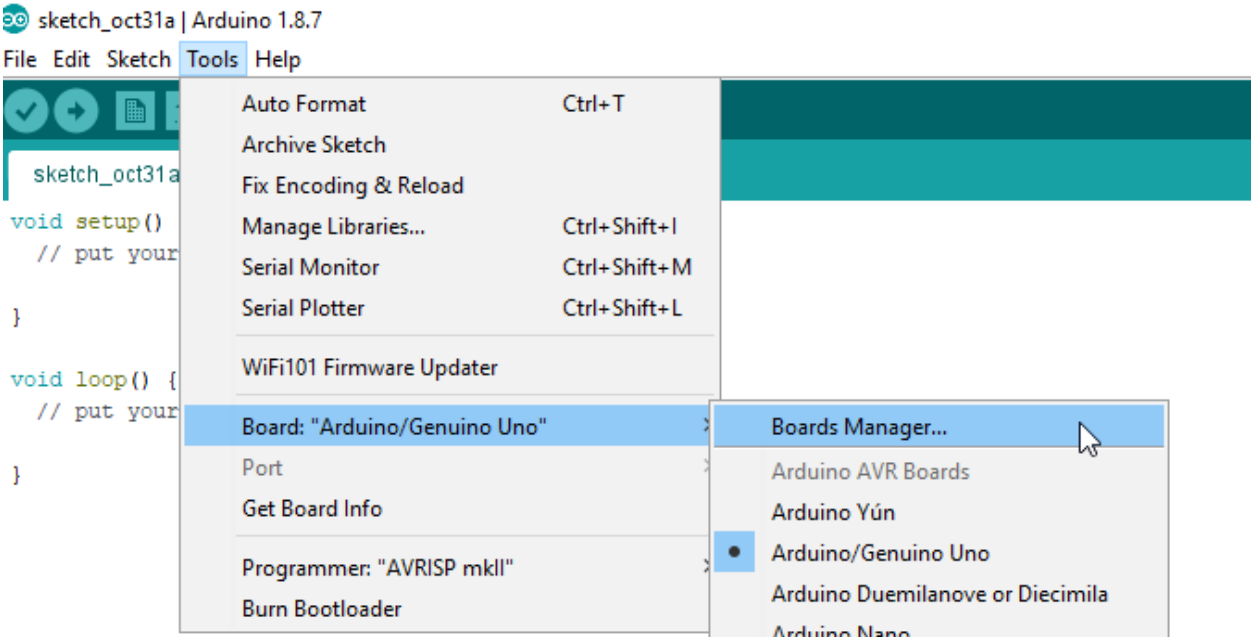

Figure 6

- Type **esp32** into the filter at the top of the Boards Manager dialog, and you should see an “esp32 by Espressif Systems” option appear. Click on its “Install” button, and let the process run to completion. This will take several minutes to finish. Click the "Close" button once the install is completed. [Figure 7]

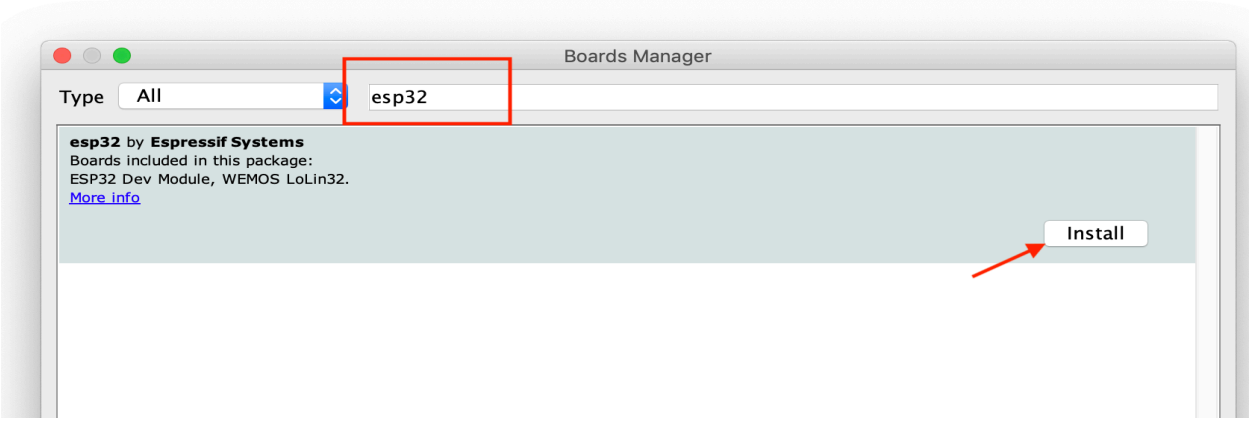

Figure 7

- To add support for the various components we will be using, click on Tools -> Manage Libraries… [Figure 8 (step 1]

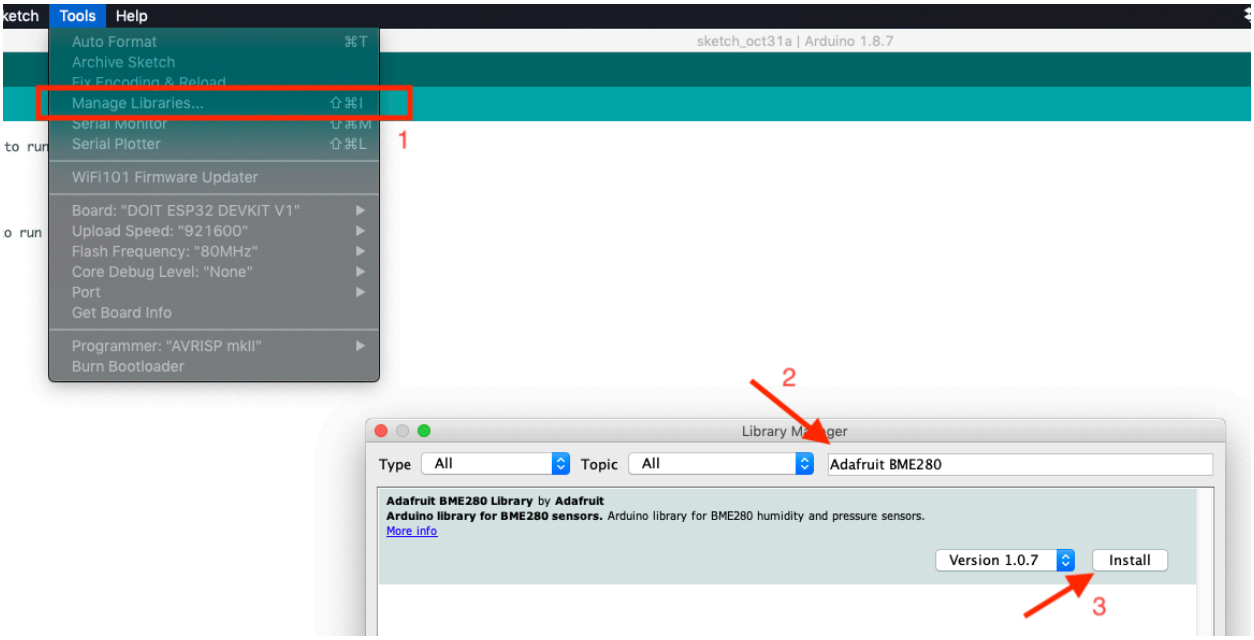

Figure 8

- Type **Adafruit BME280** into the filter at the top of the Library Manager dialog, click on the only (or first) item in the list [Figure 8 (Step 2,3)].
- On the same Library Manager window, Install **Adafruit SSD1306 by Adafruit** [Figure 9].

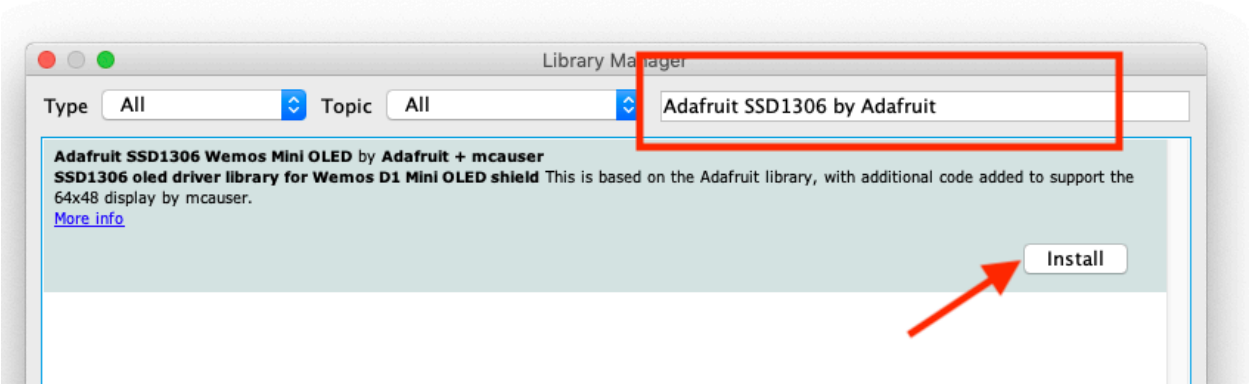

Figure 9

- Same thing, install **Adafruit Unified Sensor by Adafruit** library [Figure 10].

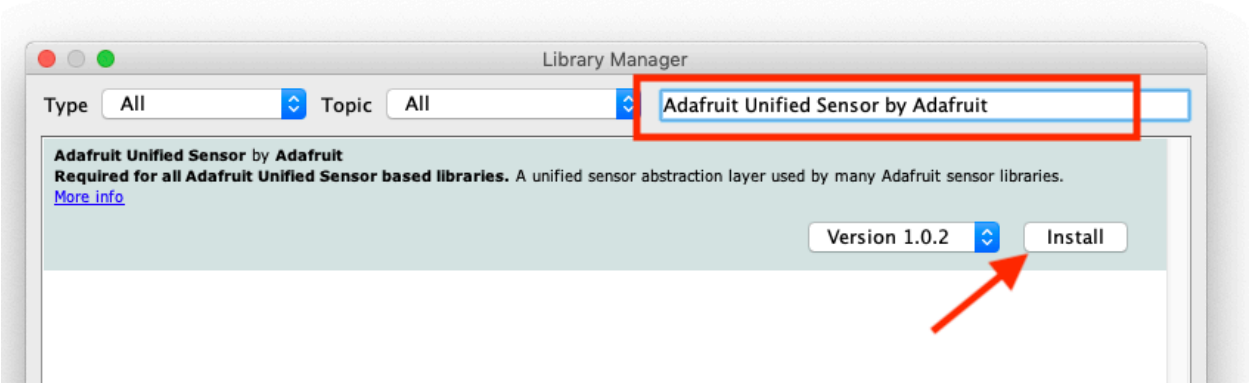

Figure 10

- Again, typing **rtclib** in the filter box, find & install **RTClib by Adafruit** library [Figure 11].

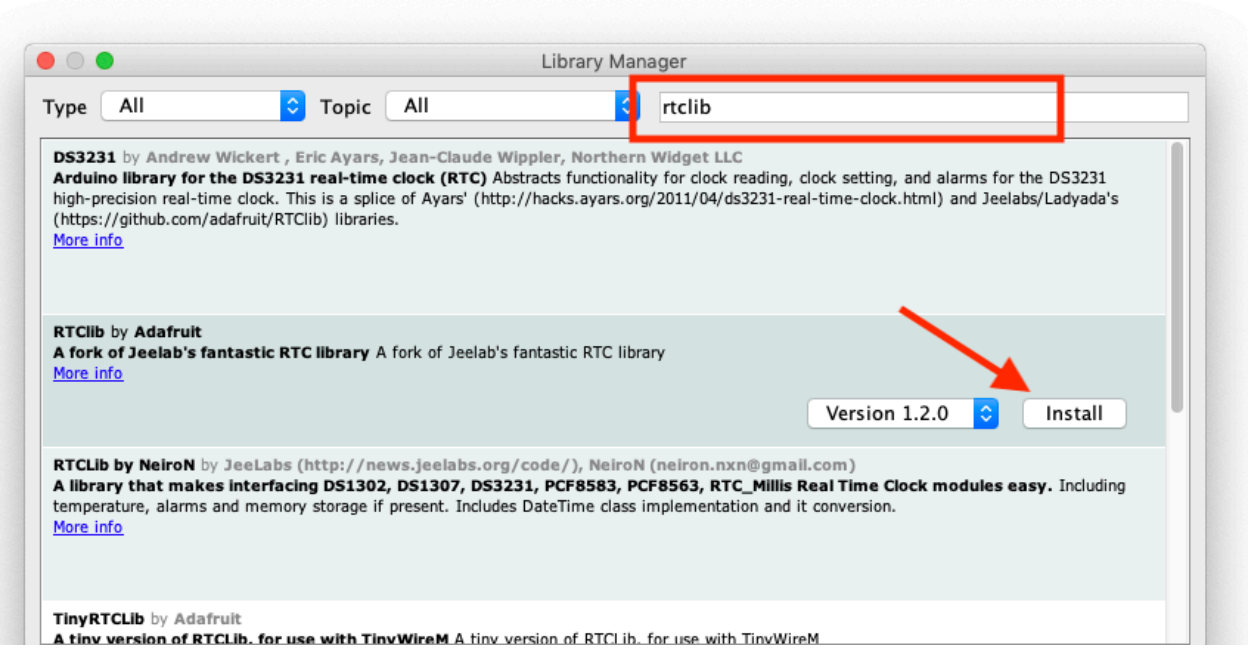

Figure 11

- Click the “Close” button to return to the main Arduino software window.

Congratulations!!!!
You just finished the most difficult part. Give yourself a cookie!!! ☺