INSTALLATION OF ESP8266

Installation of Arduino environment

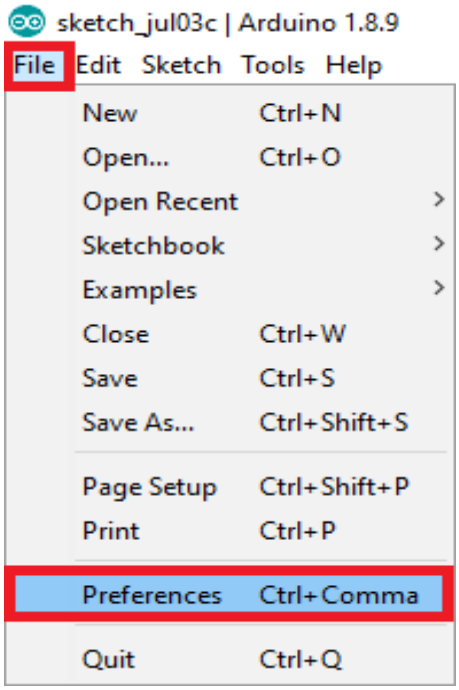
Firstly it is necessary to use the Arduino IDE development environment.

Download and install Arduino IDE from the link **https://www.arduino.cc/en/Main/Software**

ESP8266 Add-on in Arduino IDE

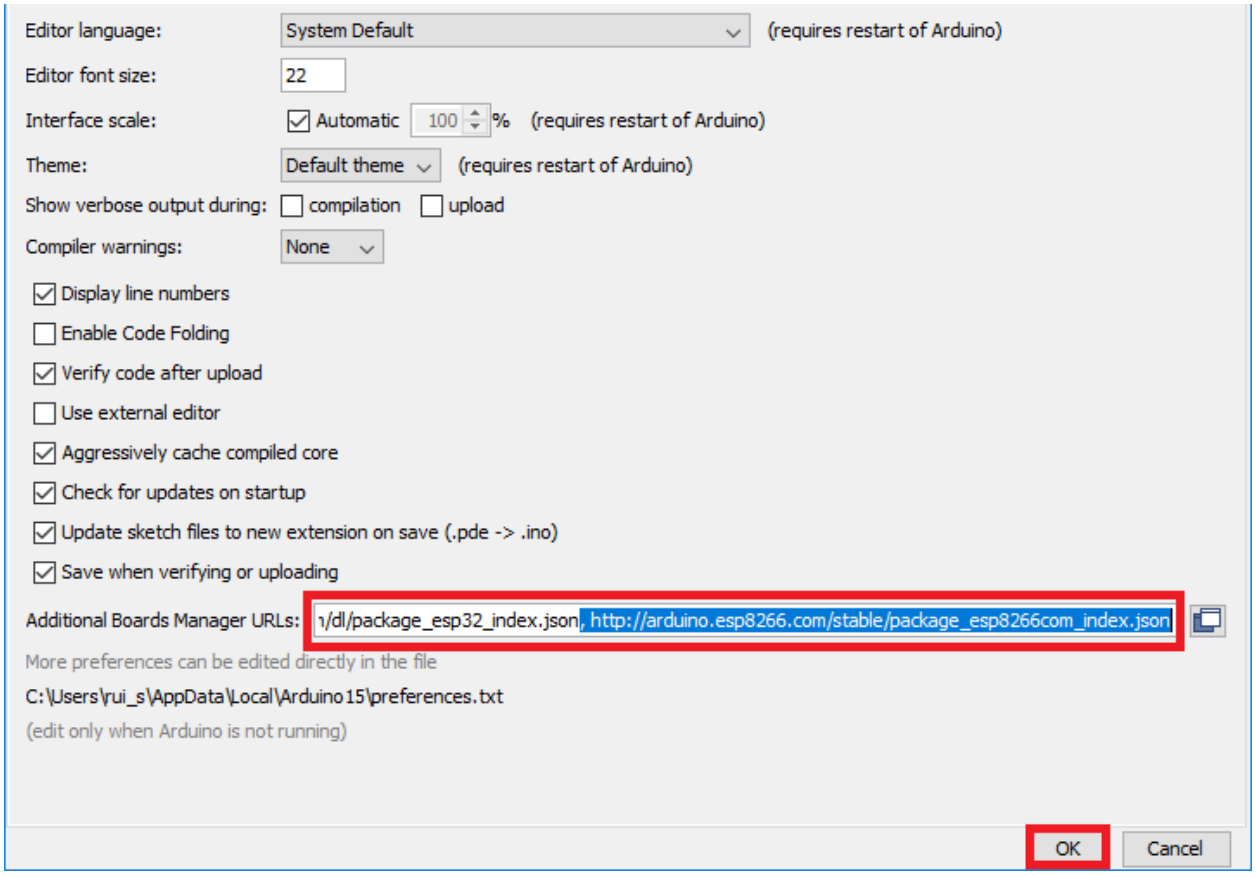
To install the ESP8266 board in your Arduino IDE, follow these next instructions:

In your Arduino IDE, go to **File**> **Preferences**



http://arduino.esp8266.com/stable/package_esp8266com_index.json

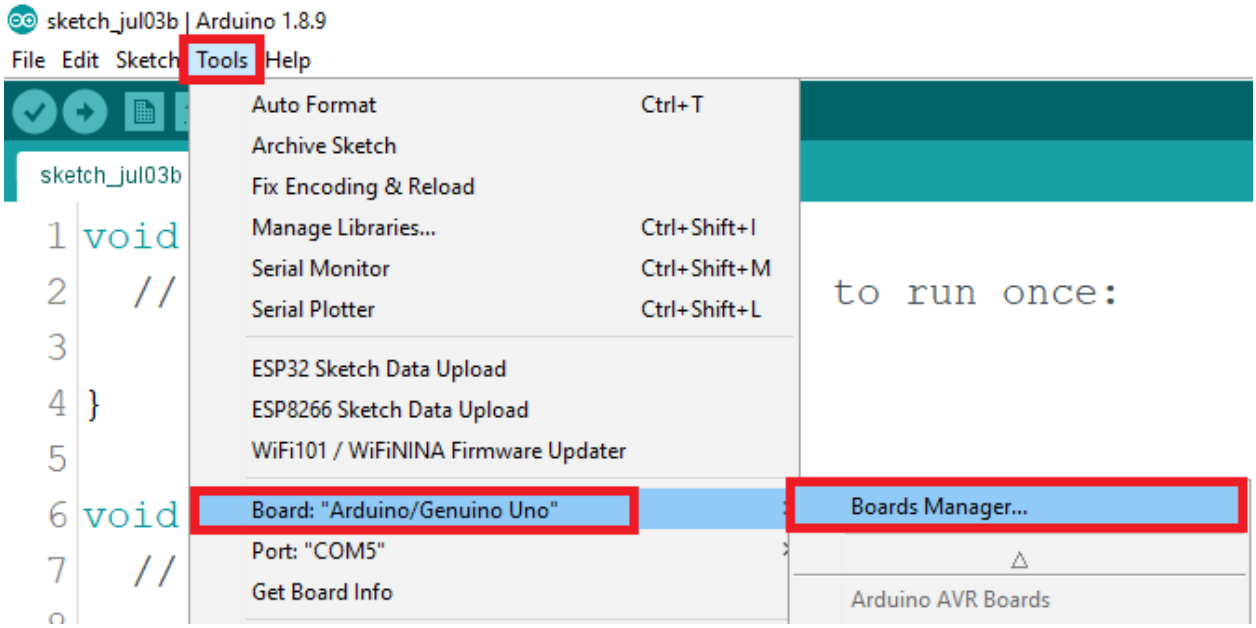
into the “Additional Boards Manager URLs” field as shown in the figure below. Then, click the “OK” button:



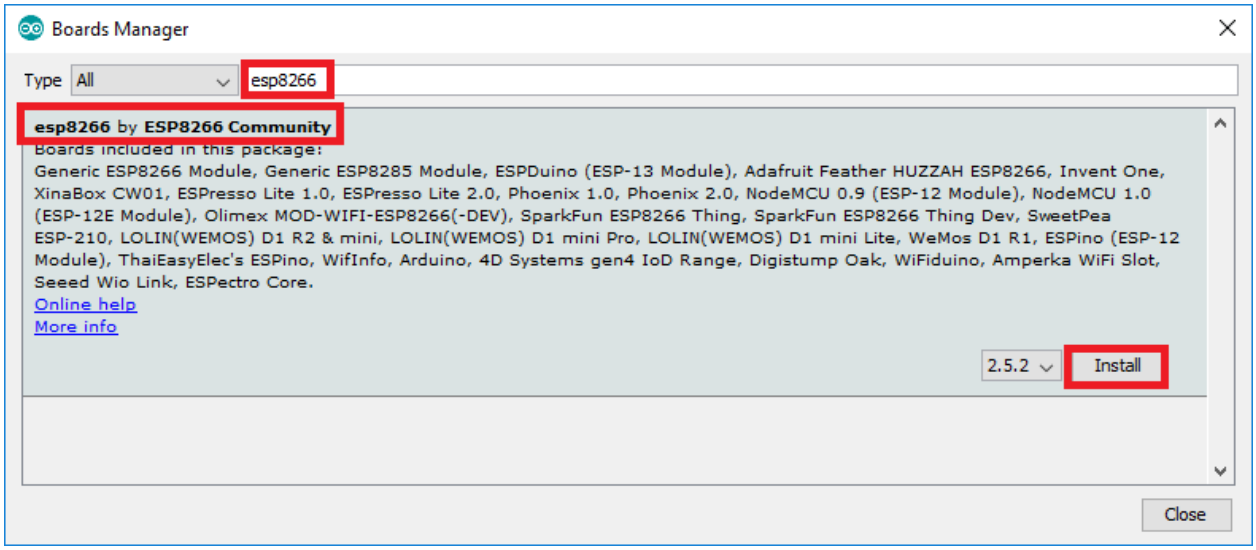
Note: if you already have the ESP32 boards URL, you can separate the URLs with a comma as follows:

https://dl.espressif.com/dl/package_esp32_index.json, http://arduino.esp8266.com/stable/package_esp8266com_index.json

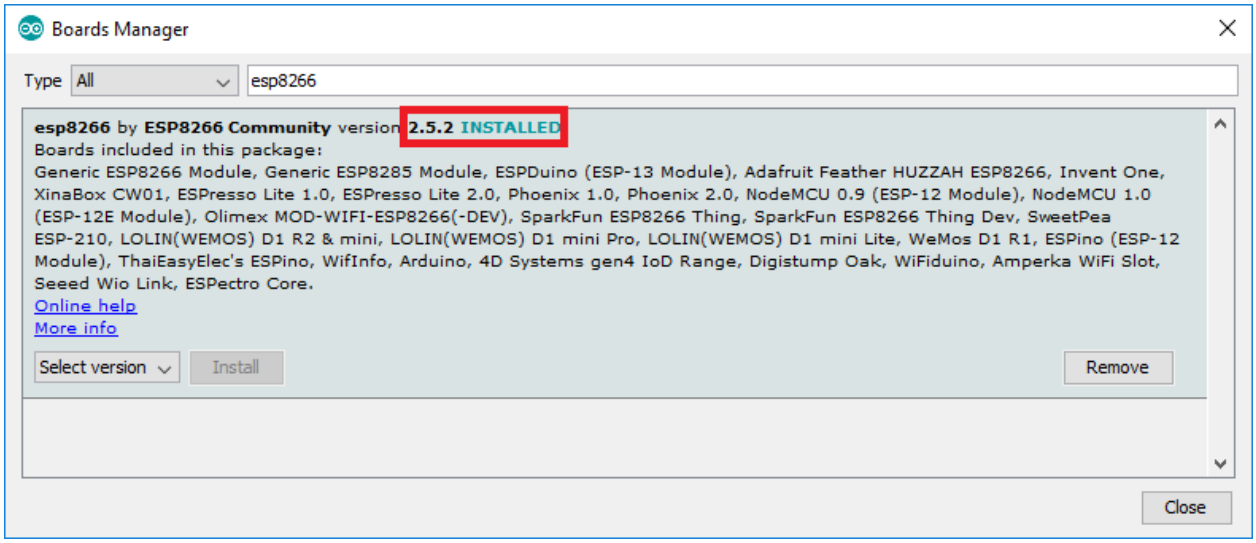
Open the Boards Manager. Go to **Tools** > **Board** > **Boards Manager…**



Search for **ESP8266** and press install button for the "**ESP8266 by ESP8266 Community**":



That’s it. It should be installed after a few seconds.



Note:

To add the three board preference links you provided to the Arduino IDE, follow these steps:

1. Open the Arduino IDE.
2. Go to "File" > "Preferences."
3. In the "Additional Boards Manager URLs" field, enter the following three URLs, separated by commas:

https://dl.espressif.com/dl/package_esp32_index.json,http://arduino.esp8266.com/stable/package_esp8266com_index.json,https://github.com/stm32duino/BoardManagerFiles/raw/main/package_stmicroelectronics_index.json

4. Make sure there are no spaces before or after each URL, and be sure to include the "http://" or "https://" part.
5. Click the "OK" button to save the preferences.
6. Now, go to "Tools" > "Board" > "Boards Manager."
7. In the Boards Manager, you can search for and install the board packages associated with the URLs you added.
8. Search for "esp32" and "esp8266" to install the ESP32 and

ESP8266 boards, and search for "STM32" to install the STM32 boards.

Once you've installed the board packages, you can select the desired board from the "Tools" > "Board" menu.

That's it! You've successfully added and installed the board preference links for ESP32, ESP8266, and STM32 boards in the Arduino IDE.