

Arduino Environment Preparation

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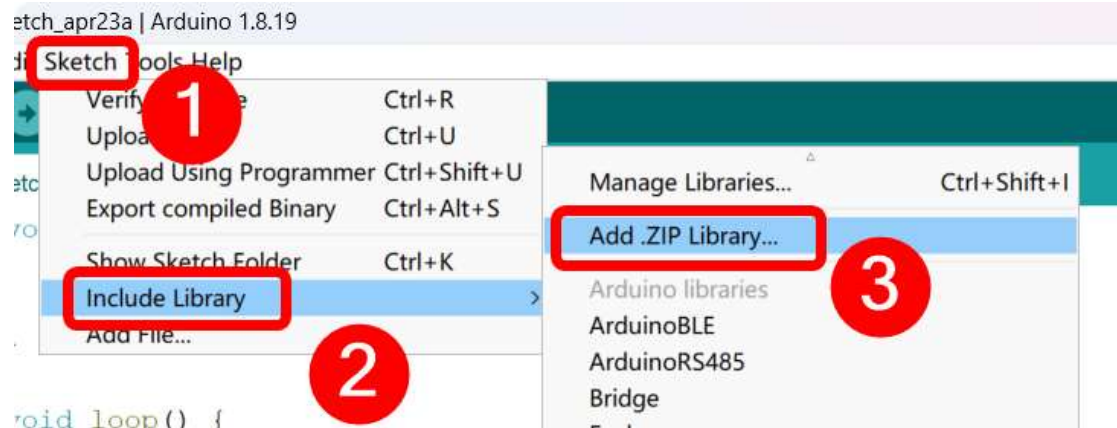
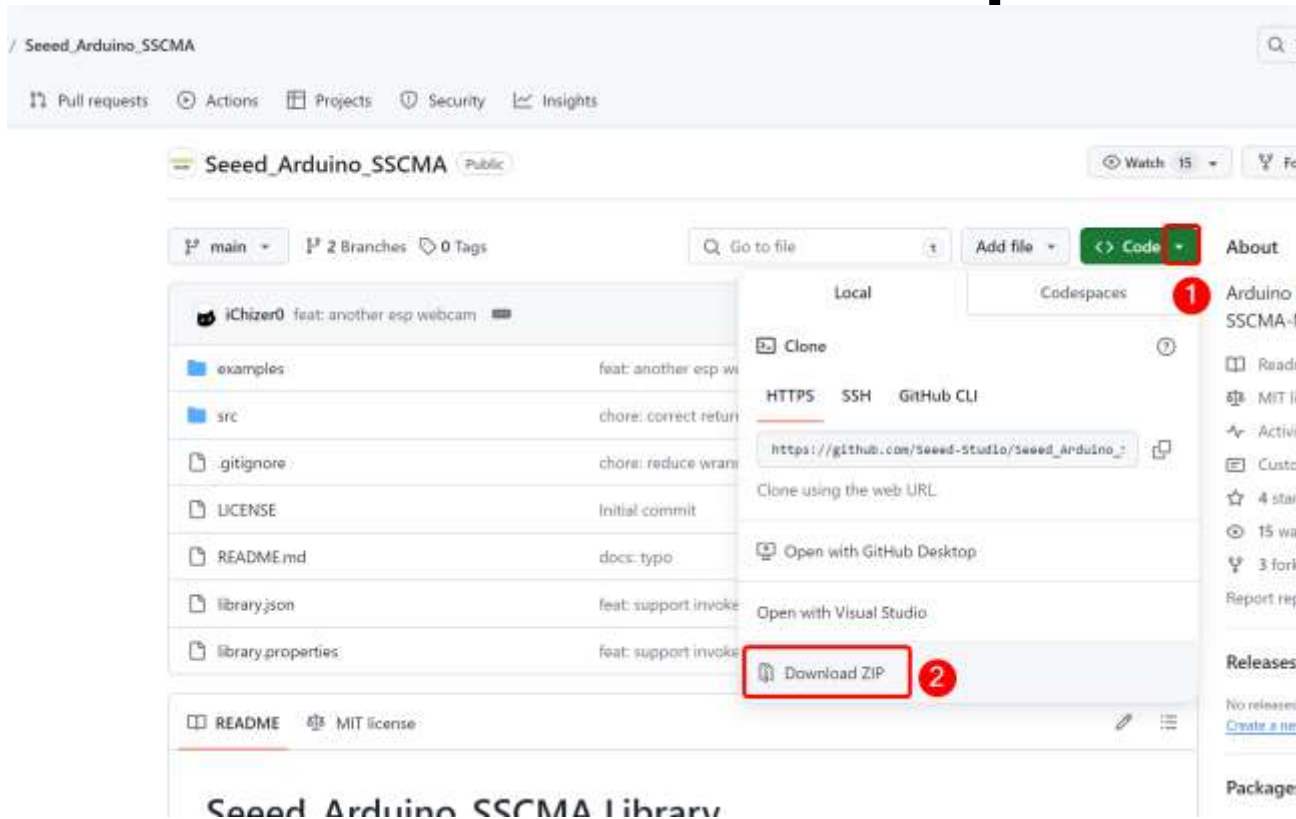
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4 NEW IOT MONITORING

Help

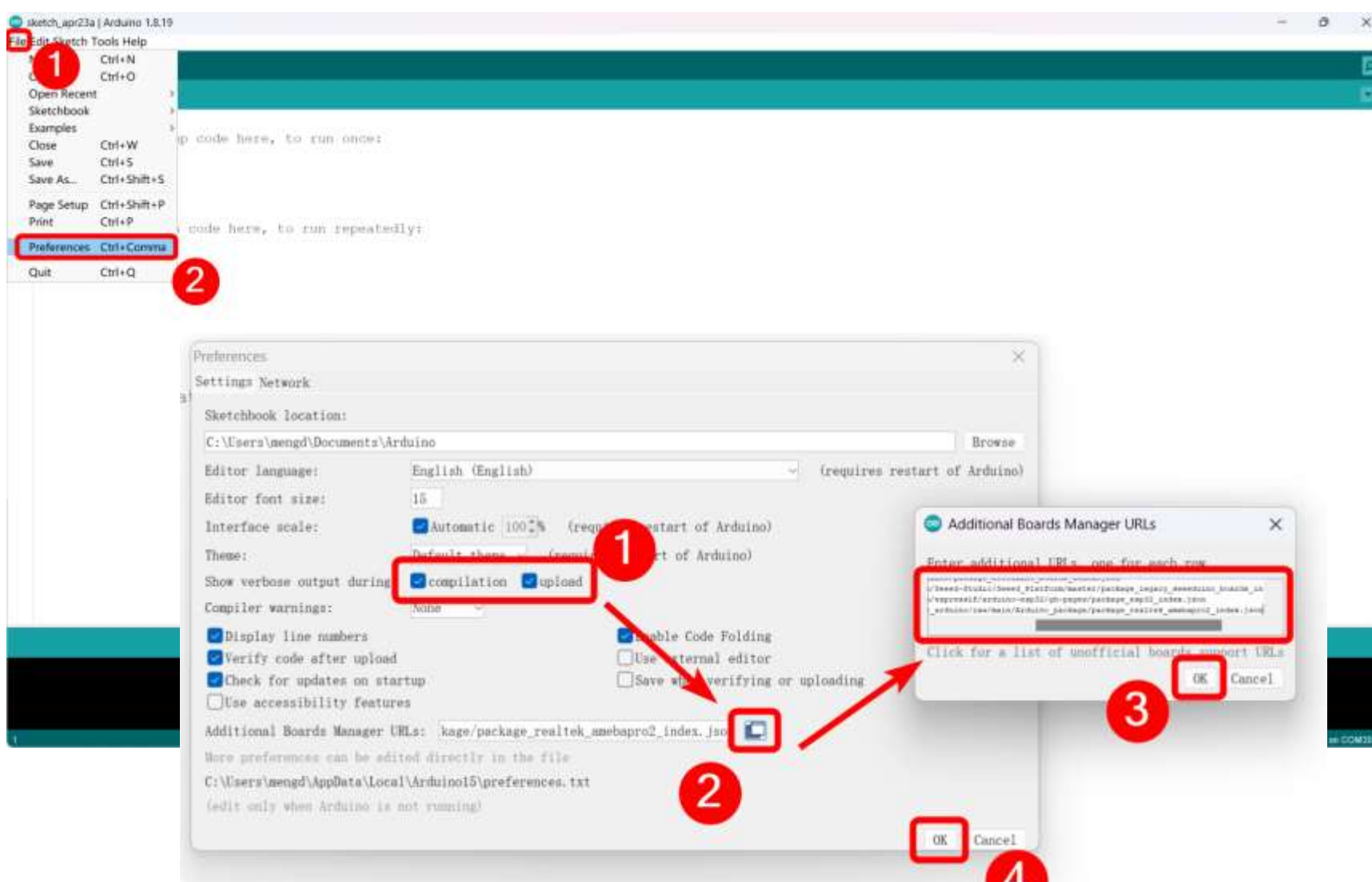
seed studio

Arduino Environment Preparation



1. Open your web browser and navigate to the GitHub repository:
https://github.com/Seeed-Studio/Seeed_Arduino_SSCMA
2. Click on the green "Code" button and select "Download ZIP" to download the library as a ZIP file.
3. Save the ZIP file to a location on your computer where you can easily find it.
4. Open the Arduino IDE.
5. Go to Sketch > Include Library > Add .ZIP Library.
6. In the file browser window that appears, navigate to the location where you saved the downloaded ZIP file.
7. Select the ZIP file and click "Open" to add the library to your Arduino IDE.
8. The Seeed_Arduino_SSCMA library should now be installed and ready to use.
9. To verify the installation, go to Sketch > Include Library and check if "Seeed_Arduino_SSCMA" appears in the list of installed libraries.

Arduino Environment Preparation



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

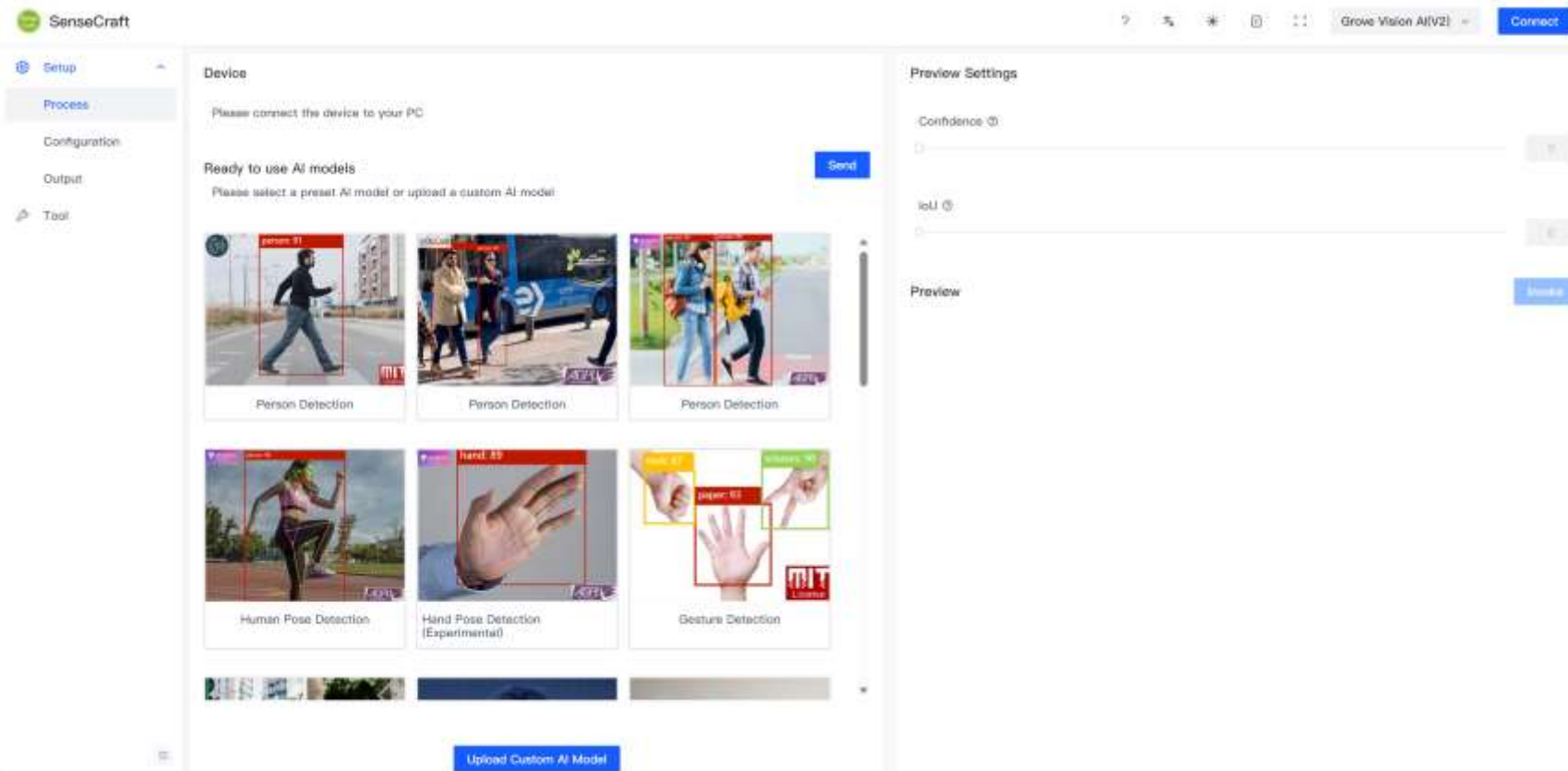
https://raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package_esp32_index.json

4. Click "OK" to close the Preferences window.

Equipment Introduction & Demonstration

SenseCraft Model Assistant

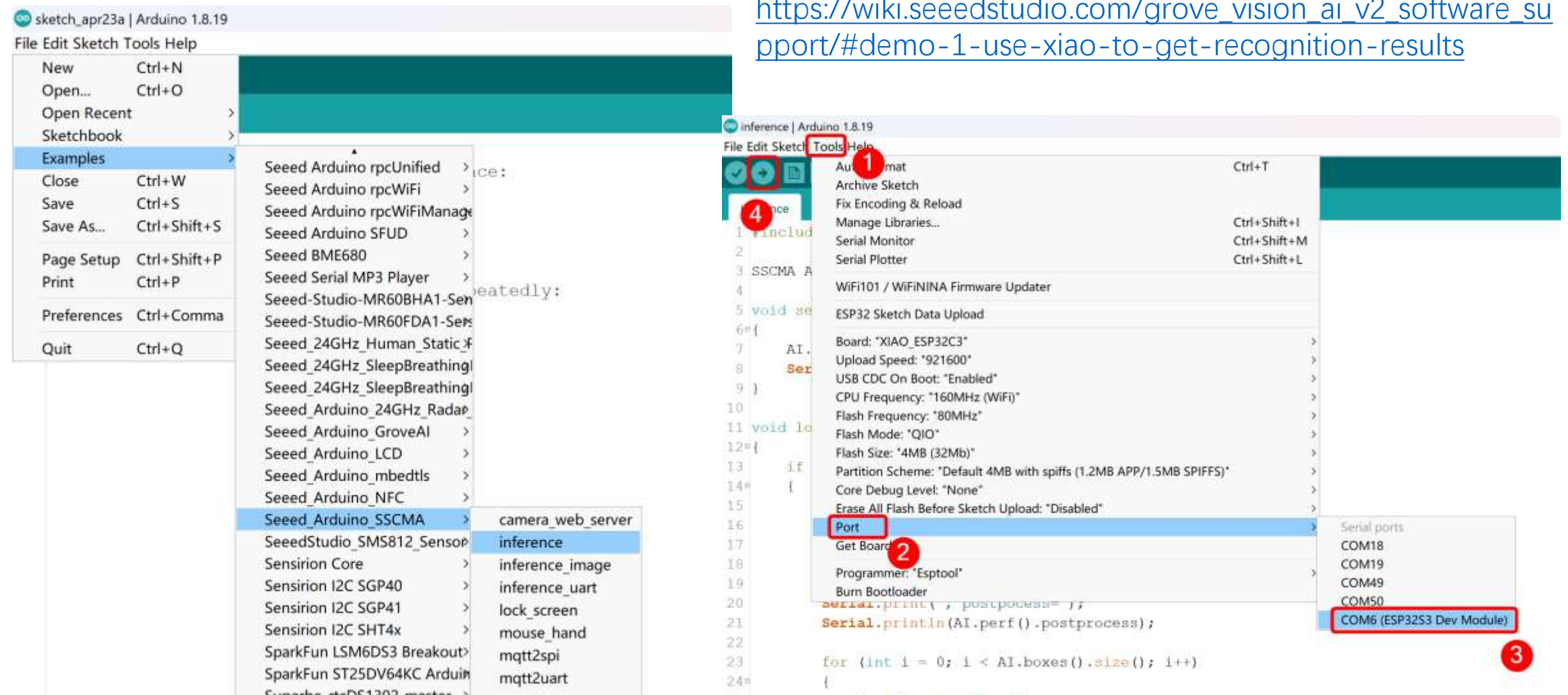
SenseCraft AI empowers users to effortlessly deploy a vast library of publicly available AI models onto their edge devices such as Recomputer (Jetson), XIAO S3, and more, and provides a seamless and user-friendly experience, allowing you to deploy public AI models directly onto your edge devices with just a few clicks. Say goodbye to complex configurations and coding – with SenseCraft AI, you can effortlessly unlock the power of AI on your devices. SenseCraft AI also allows you to upload and share your own trained AI models with the community. By publishing your models, you contribute to a growing library of shared knowledge, fostering collaboration and innovation among AI enthusiasts.



<https://seeed-studio.github.io/SenseCraft-Web-Toolkit/#/setup/process>

MCU + AI Sensors = Unlimited Creative Possibilities

https://wiki.seeedstudio.com/grove_vision_ai_v2_software_support/#demo-1-use-xiao-to-get-recognition-results



MCU + AI Sensors = Unlimited Creative Possibilities

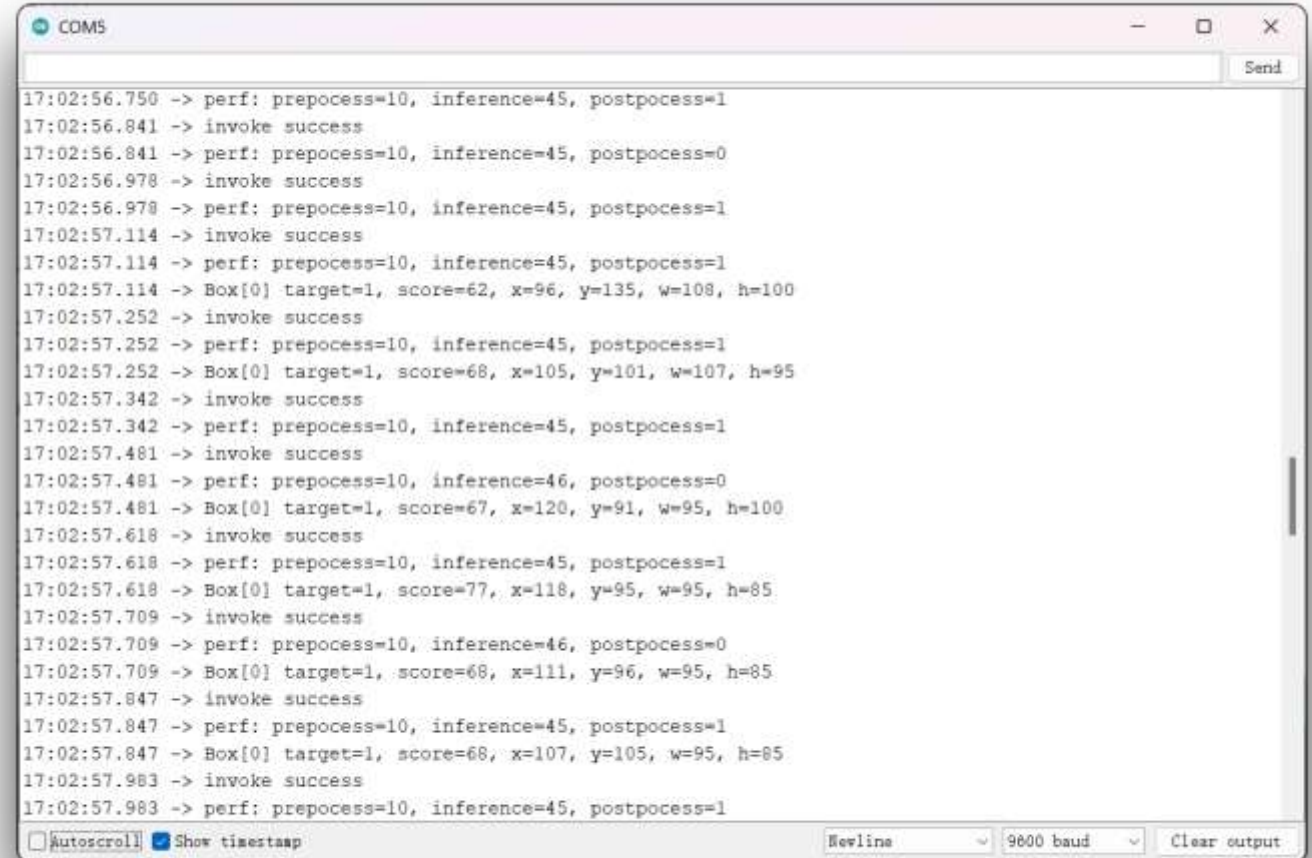
https://wiki.seeedstudio.com/grove_vision_ai_v2_software_support/#demo-1-use-xiao-to-get-recognition-results



```
inference | Arduino 1.8.19
File Edit Sketch Tools Help

1 | #include <Seeed_Arduino_SSCMA.h>
2
3 | SSCMA AI;
4
5 | void setup()
6 | {
7 |     AI.begin();
8 |     Serial.begin(9600);
9 | }
10
11 | void loop()
12 | {
13 |     if (!AI.invoke())
14 |     {
15 |         Serial.println("invoke success");
16 |     }
17 | }

Done compiling
"C:\Users\mengd\AppData\Local\Arduino15\packages\esp32\tools\platformio\bin\platformio.exe"
"C:\Users\mengd\AppData\Local\Arduino15\packages\esp32\tools\esptool.py v4.5.1
Creating esp32c3 image...
Merged 2 ELF sections
ESP32C3, Enabled, Default 4MB with spiffs (1.2MB APP/1.5MB SPIFFS), 160MHz (WiFi), QIO, 80MHz, 4MB (32Mb), 921600, None, Disabled on COM5
```



```
COM5
17:02:56.750 -> perf: preprocess=10, inference=45, postprocess=1
17:02:56.841 -> invoke success
17:02:56.841 -> perf: preprocess=10, inference=45, postprocess=0
17:02:56.978 -> invoke success
17:02:56.978 -> perf: preprocess=10, inference=45, postprocess=1
17:02:57.114 -> invoke success
17:02:57.114 -> perf: preprocess=10, inference=45, postprocess=1
17:02:57.114 -> Box[0] target=1, score=62, x=96, y=135, w=108, h=100
17:02:57.252 -> invoke success
17:02:57.252 -> perf: preprocess=10, inference=45, postprocess=1
17:02:57.252 -> Box[0] target=1, score=68, x=105, y=101, w=107, h=95
17:02:57.342 -> invoke success
17:02:57.342 -> perf: preprocess=10, inference=45, postprocess=1
17:02:57.481 -> invoke success
17:02:57.481 -> perf: preprocess=10, inference=46, postprocess=0
17:02:57.481 -> Box[0] target=1, score=67, x=120, y=91, w=95, h=100
17:02:57.618 -> invoke success
17:02:57.618 -> perf: preprocess=10, inference=45, postprocess=1
17:02:57.618 -> Box[0] target=1, score=77, x=118, y=95, w=95, h=85
17:02:57.709 -> invoke success
17:02:57.709 -> perf: preprocess=10, inference=46, postprocess=0
17:02:57.709 -> Box[0] target=1, score=68, x=111, y=96, w=95, h=85
17:02:57.847 -> invoke success
17:02:57.847 -> perf: preprocess=10, inference=45, postprocess=1
17:02:57.847 -> Box[0] target=1, score=68, x=107, y=105, w=95, h=85
17:02:57.983 -> invoke success
17:02:57.983 -> perf: preprocess=10, inference=45, postprocess=1

Autoscroll Show timestamp Newline 9600 baud Clear output
```

MCU + AI Sensors = Unlimited Creative Possibilities

https://wiki.seeedstudio.com/grove_vision_ai_v2_demo/#step-2-xiao-connects-to-the-computer-and-uploads-the-programme-for-xiao-1



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Grove Vision AI V2

Based on Arm M55+U55

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