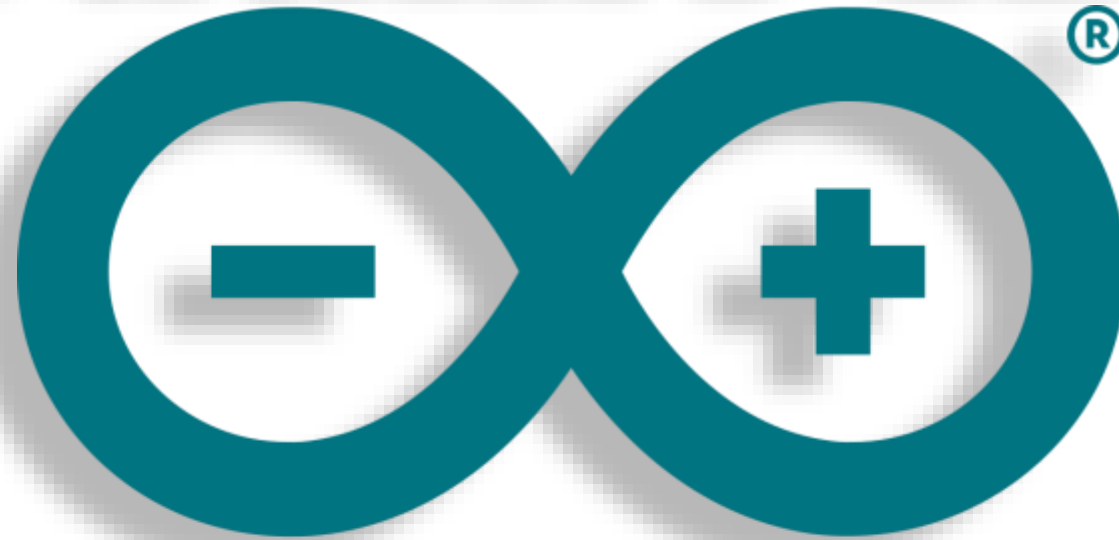


Install Arduino IDE



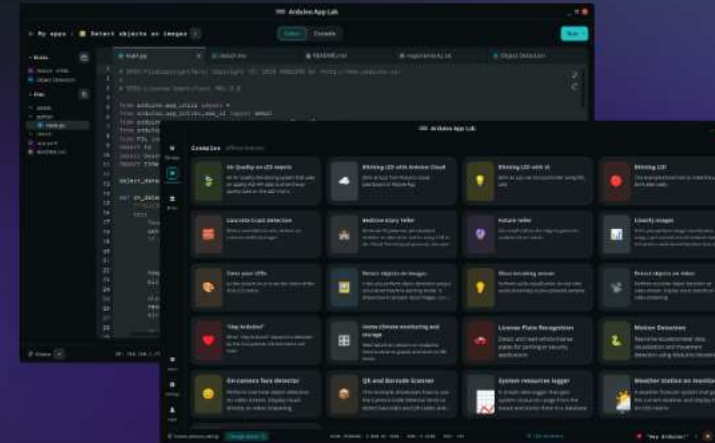
ARDUINO

<https://www.arduino.cc/en/software>

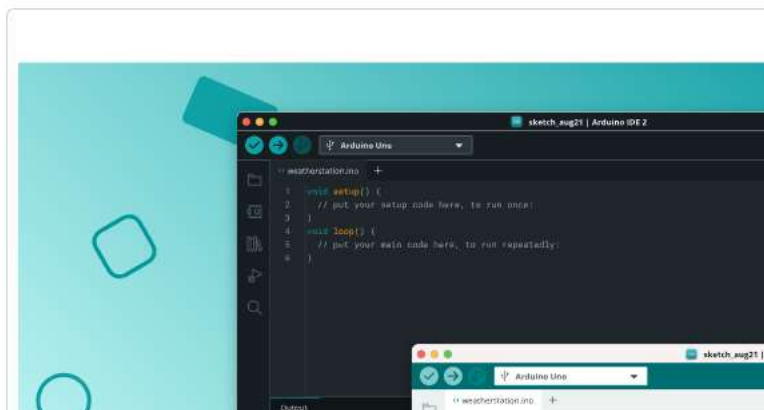
App Lab: from Sketch to Linux to AI, all in one place

The new, all-in-one development environment designed to redefine how you build applications across embedded systems, Linux, and edge AI.

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Bring Your Projects to Life with Arduino Software



Arduino IDE 2.3.6

[Release notes](#)

The new major release of the Arduino IDE is faster and even more powerful! In addition to a more modern editor and a more responsive interface it features autocompletion, code navigation, and even a live debugger. For more details, check the [Arduino IDE 2.3.6 documentation](#).

Windows Win 10 or newer (64-bit)

[DOWNLOAD](#)

Bring Your Projects to Life with Arduino Software



Arduino IDE 2.3.6

[Release notes](#)

The new major release of the Arduino IDE is faster and even more powerful! In addition to a more modern editor and a more responsive interface it features autocompletion, code navigation, and even a live debugger. For more details, check the [Arduino IDE 2.0 documentation](#).

Windows Win 10 or newer (64-bit)

Windows Win 10 or newer (64-bit)

Windows MSI installer

Windows ZIP file

Linux Appliance (64-bit X86-64)

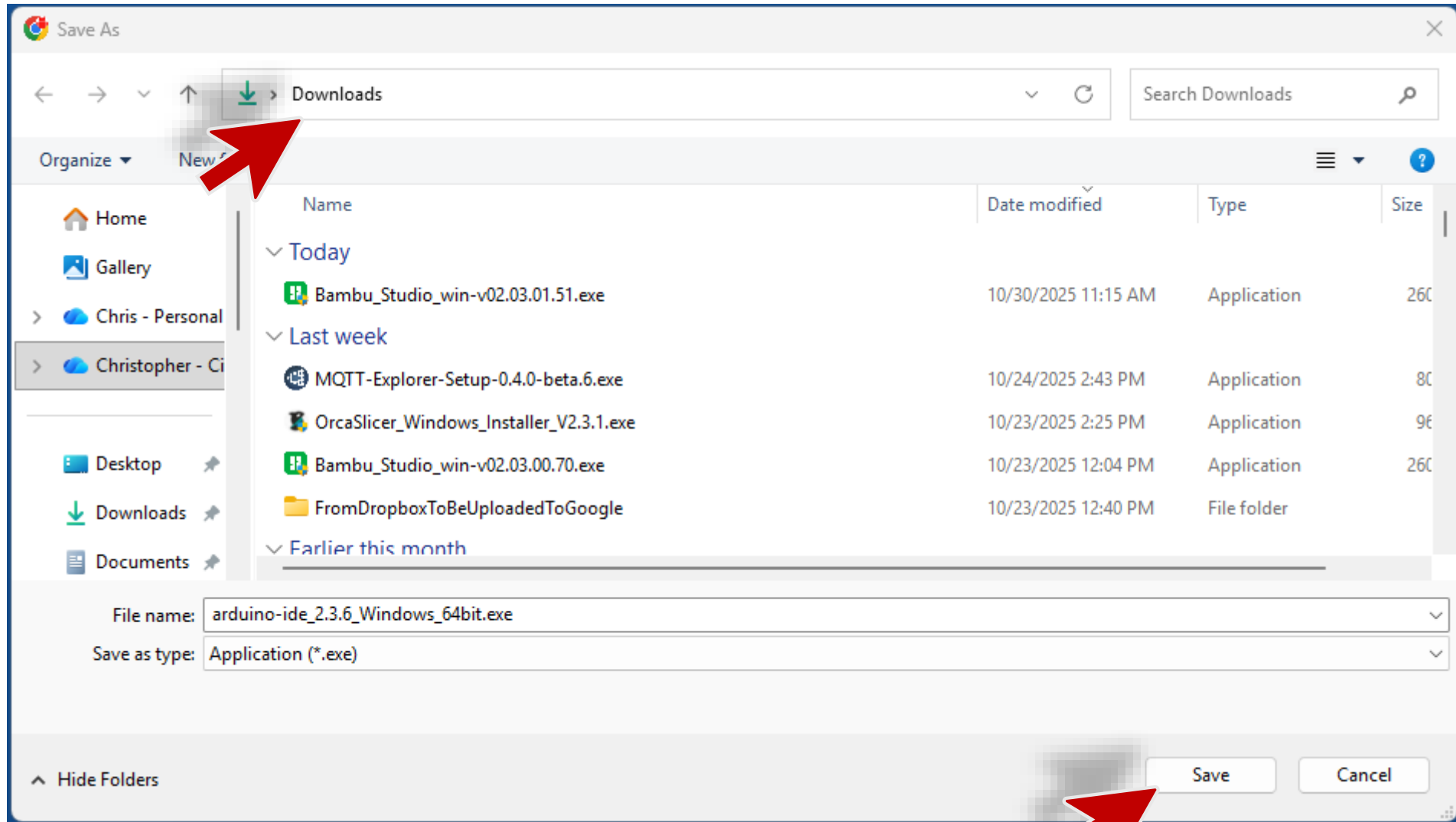
Linux ZIP file (64-bit X86-64)

macOS Intel 10.15 Catalina or newer (64-bit)

macOS Apple Silicon 11 Big Sur or newer (64-bit)

DOWNLOAD

`</>` **Legacy IDE (1.8.19)**
Download a legacy version of the Arduino IDE.



Downloads

← → ↑ ↻ > Downloads > Search Downloads

+ New ✂ 📄 📁 📄 📄 📄 📄 ⬆ Sort ⌵ View ⌵ ⋮ Details

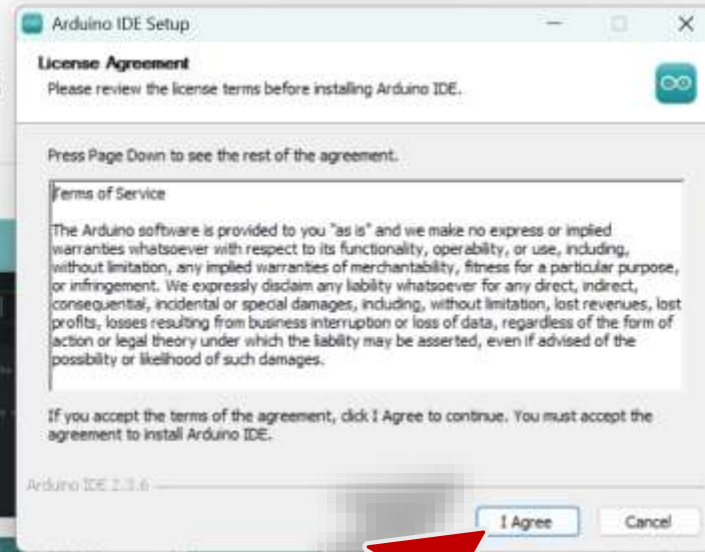
Home
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Videos
SAO_Application
Screenshots

> Chris's S25 Ultra
▼ This PC
 > Windows-SSD (C:) 103 items

Name	Date modified	Type	Size
▼ Today			
🔗 arduino-ide_2.3.6_Windows_64bit.exe	11/30/2025 7:58 PM	Application	1
> Last week			
> Earlier this month			
> Last month			
> Earlier this year			

Bring Your Projects



Arduino IDE is faster and even more modern editor and a more responsive code navigation, and even a live preview of the code. Check the [Arduino IDE 2.0 documentation](#).

DOWNLOAD

Nightly Builds



Download a preview of the incoming release with the most updated features and bugfixes.

The Arduino IDE 2.0 is open source and its source code is hosted on [GitHub](#).



Legacy IDE (1.8.19)

Download a legacy version of the Arduino IDE.

Bring Your Projects



Arduino IDE Setup

Choose Installation Options

Who should this application be installed for?

Please select whether you wish to make this software available to all users or just yourself

☐ Anyone who uses this computer (all users)

☒ Only for me (corbi)

Fresh install for current user only.

Arduino IDE 2.0.6

< Back Next > Cancel



Nightly Builds



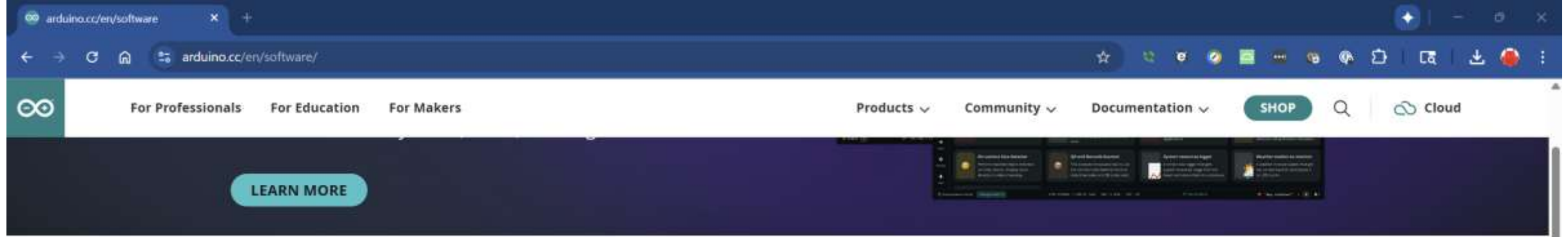
Download a preview of the incoming release with the most updated features and bugfixes.

The Arduino IDE 2.0 is open source and its source code is hosted on [GitHub](#).

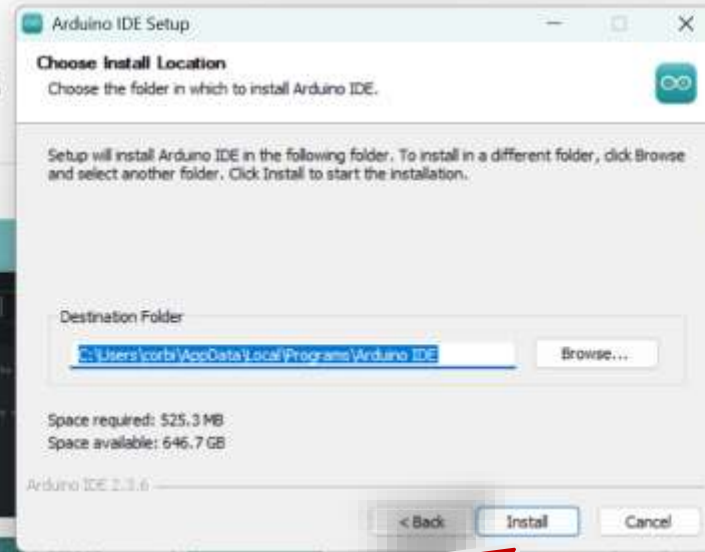


Legacy IDE (1.8.19)

Download a legacy version of the Arduino IDE.



Bring Your Projects



Nightly Builds

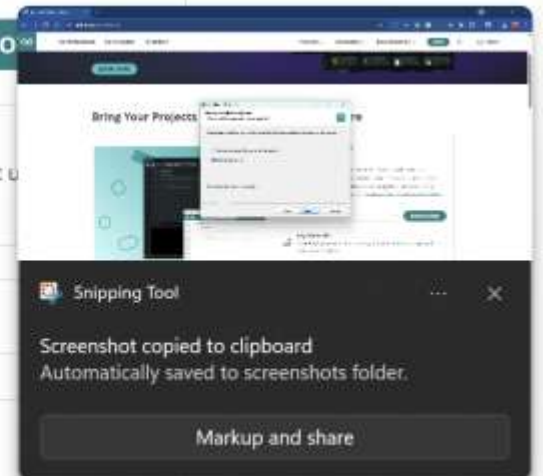
Download a preview of the incoming release with the most up-to-date features and bugfixes.

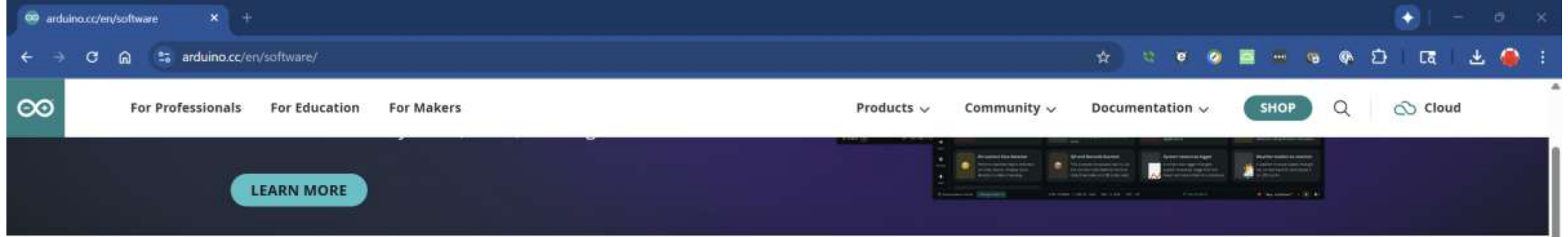
The Arduino IDE 2.0 is open source and its source code is hosted on [GitHub](#).



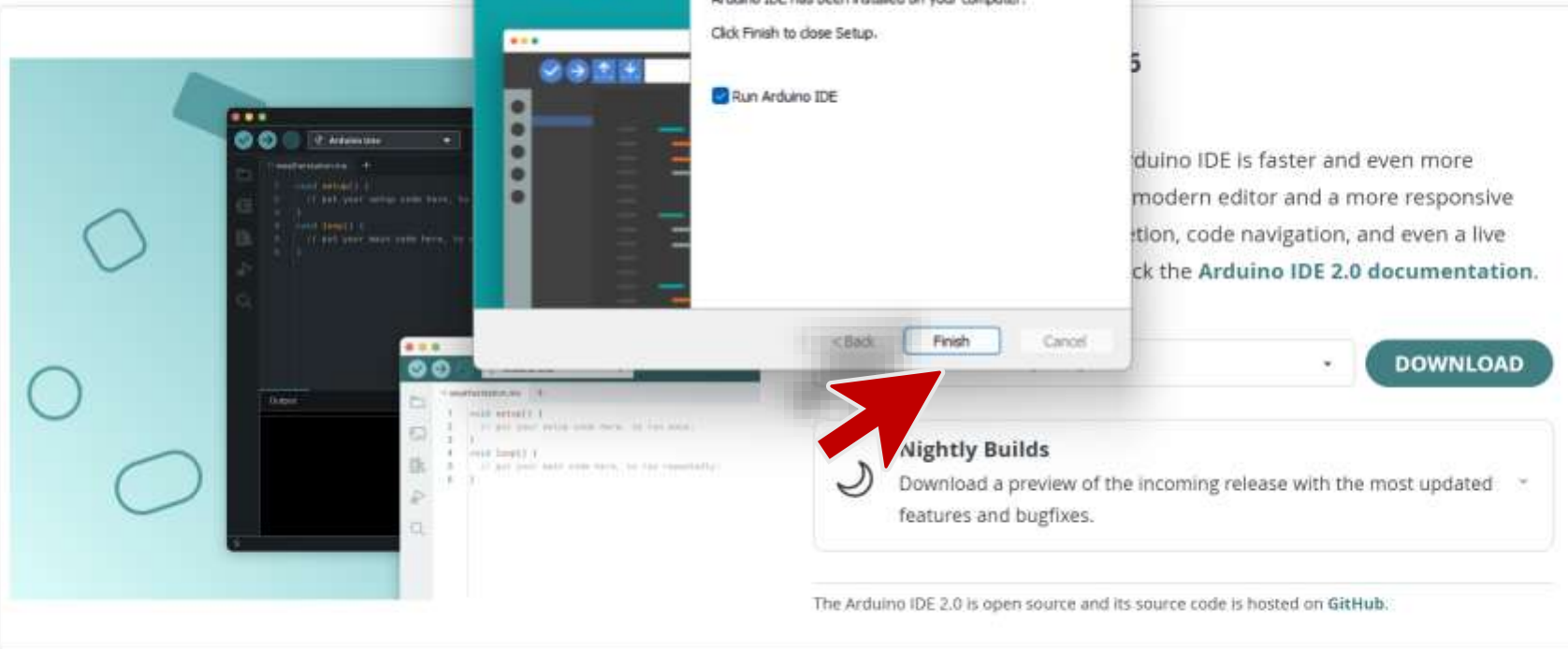
Legacy IDE (1.8.19)

Download a legacy version of the Arduino IDE.





Bring Your Projects



The image displays the Arduino IDE Setup window, which is titled 'Completing Arduino IDE Setup'. It informs the user that the IDE has been installed and provides instructions to click 'Finish' to close the setup. A checkbox labeled 'Run Arduino IDE' is checked. The window also features a 'Finish' button, which is highlighted by a red arrow. In the background, the Arduino IDE interface is visible, showing a code editor with a sketch and a terminal window.

Arduino IDE has been installed on your computer.
Click Finish to close Setup.

☒ Run Arduino IDE

< Back Finish Cancel

Nightly Builds
Download a preview of the incoming release with the most updated features and bugfixes.

The Arduino IDE 2.0 is open source and its source code is hosted on [GitHub](#).

Legacy IDE (1.8.19)
Download a legacy version of the Arduino IDE.

Set Up Arduino IDE

Install ESP Boards

***Likely redundant with newer IDE**

ESP32 Dev Board

sketch_nov2a.ino

```
1 void setup() {  
2   // put your setup code here, to run once:  
3  
4 }  
5  
6 void loop() {  
7   // put your main code here, to run repeatedly:  
8  
9 }  
10
```

- New Sketch Ctrl+N
- New Cloud Sketch Alt+Ctrl+N
- Open... Ctrl+O
- Open Recent >
- Sketchbook >
- Examples >
- Close Ctrl+W
- Save Ctrl+S
- Save As... Ctrl+Shift+S
- Preferences... Ctrl+Comma
- Advanced >
- Quit Ctrl+Q

ESP32S3

{
setup code here, to run once:

main code here, to run repeatedly:

ESP32 Dev Board

sketch_nov2a.ino

```
1 void setup() {  
2   // put your setup code here, to run once:  
3  
4 }  
5  
6 void loop() {  
7   // put your main code here, to  
8  
9 }  
10
```

Preferences

Settings

Network

Sketchbook location:

c:\Users\corbi\Documents\Arduino

BROWSE

☐ Show files inside Sketches

Editor font size:

14

Interface scale:

☒ Automatic 100 %

Theme:

Light

Language:

English

(Reload required)

Show verbose output during

☐ compile ☐ upload

Compiler warnings

None

☐ Verify code after upload☒ Auto save☐ Editor Quick Suggestions

Additional boards manager URLs:

[ubusercontent.com/espressif/arduino-esp32/gh-pages/package_esp32_index.json](https://raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package_esp32_index.json)

CANCEL

OK

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

corbitt799 / SENATIA_2025_Projects

Type / to search

<> Code

Issues

Pull requests

Actions

Projects

Security

Insights

Settings

Files

main

Go to file

Boron_Code

Modified_appGlobals.h

Particle_Event_Template

Particle_HTTP_Template

README.md

XIAO_MAC_Tool

SENATIA_2025_Projects / README.md

corbitt799 Fix grammatical error in README.md 39fa4eb · 3 hours ago History

Preview Code Blame 63 lines (37 loc) · 1.89 KB

SE NATIA 2025 Conference Projects

This repository contains setup details and useful links for our 2025 projects.

Please DO NOT try to work ahead of class. We will reference sections of this site when appropriate.

ESP32 Camera Setup with Arduino IDE

Arduino IDE Download

Download the latest Arduino IDE from the official Arduino website:

<https://www.arduino.cc/en/software/>

ESP32 Board Manager URL

Add the following Board Manager URL in Arduino IDE for ESP32 board support:

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

ESP32-CAM_MJPEG2SD

ESP32 Dev Board

BOARDS MANAGER

Filter your search...

All

Arduino AVR Boards by

Arduino

Boards included in this package:

Arduino Yún, Arduino UNO, Arduino
UNO Mini, Arduino UNO WiFi,...[More info](#)

1.8.6

INSTALL

Arduino ESP32 Boards by

Arduino

Boards included in this package:

Arduino Nano ESP32

[More info](#)

2.0.18-

INSTALL

**Arduino Mbed OS Edge
Boards** by Arduino

Boards included in this package:

Arduino Edge Control

[More info](#)

4.4.1

INSTALL

**Arduino Mbed OS Giga
Boards** by Arduino

sketch_nov2a.ino

```
1 void setup() {  
2   // put your setup code here, to run once:  
3  
4 }  
5  
6 void loop() {  
7   // put your main code here, to run repeatedly:  
8  
9 }  
10
```

ESP32 Dev Board

BOARDS MANAGER

esp

Filter: All

Arduino AVR Boards by

Arduino

Boards included in this package:

Arduino Yún, Arduino UNO, Arduino
UNO Mini, Arduino UNO WiFi, Arduin...[More info](#)

1.8.6

INSTALL

Arduino ESP32 Boards by

Arduino

Boards included in this package:

Arduino Nano ESP32

[More info](#)

2.0.18-

INSTALL

esp32 by Espressif Systems

Boards included in this package:

ESP32 Dev Board, ESP32-C3 Dev
Board, ESP32-C6 Dev Board, ESP32-...[More info](#)

3.3.2

INSTALL

sketch_nov2a.ino

```
1 void setup() {  
2   // put your setup code here, to run once:  
3  
4 }  
5  
6 void loop() {  
7   // put your main code here, to run repeatedly:  
8  
9 }  
10
```

ESP32 Dev Board

BOARDS MANAGER

esp

Type: All

Arduino AVR Boards by Arduino

Boards included in this package:
Arduino Yún, Arduino UNO, Arduino
UNO Mini, Arduino UNO WiFi, Arduin...
[More info](#)

1.8.6

INSTALL

Arduino ESP32 Boards by Arduino

Arduino

Boards included in this package:
Arduino Nano ESP32
[More info](#)

2.0.18

INSTALL

esp32 by Espressif Systems

Boards included in this package:
ESP32 Dev Board, ESP32-C3 Dev
Board, ESP32-C6 Dev Board, ESP3...
[More info](#)

3.3.2

INSTALL

sketch_nov2a.ino

```
1 void setup() {  
2   // put your setup code here, to run once:  
3  
4 }  
5  
6 void loop() {  
7   // put your main code here, to run repeatedly:  
8  
9 }  
10
```

Output

```
esp32:openocd-esp32@v0.12.0-esp32-20250707  
esp32:esptool_py@5.1.0  
Configuring tool.  
esp32:s3-gcc@2021r2-p5 installed  
Installing esp32:xtensa-esp-elf-gdb@11.2_20220823  
esp32:mklittlefs@4.0.2-db0513a  
esp32:esp32@3.3.2  
Installing esp32:esp32-arduino-libs@idf-release_v5.5-07e9bf49-v1  
Configuring tool.  
esp32:xtensa-esp-elf-gdb@11.2_20220823 installed  
Installing platform arduino:esp32@2.0.18-arduino.5
```

Processing esp32:3.3.2: Installing esp32:esp32-arduino-libs@idf-release_v5.5-07e9bf49-v1

Processing Arduino ESP32 Boards:2.0.18-arduino.5: Configuring tool.

Select Board

BOARDS MANAGER

esp

Type: All

Arduino AVR Boards by

Arduino

Boards included in this package:

Arduino Yún, Arduino UNO, Arduino
UNO Mini, Arduino UNO WiFi, Arduin...[More info](#)

1.8.6

INSTALL

Arduino ESP32 Boards by

Arduino

2.0.18-arduino.5 installed

Boards included in this package:

Arduino Nano ESP32

[More info](#)

2.0.18-

REMOVE

esp32 by Espressif Systems

3.3.2 installed

Boards included in this package: Fri3d
Badge 2024 (ESP32-S3-WROOM-1)

Deneyap Kart v2, Connaxio's Espr

[More info](#)

3.3.2

REMOVE

sketch_nov2a.ino

```
1 void setup() {  
2   // put your setup code here, to run once:  
3  
4 }  
5  
6 void loop() {  
7   // put your main code here, to run repeatedly:  
8  
9 }  
10
```

Remove Option Confirms Installation

Output

```
Installing esp32:openocd-esp32@v0.12.0-esp32-20250707  
Configuring tool.  
esp32:openocd-esp32@v0.12.0-esp32-20250707 installed  
Installing esp32:esptool_py@5.1.0  
Configuring tool.  
esp32:esptool_py@5.1.0 installed  
Installing esp32:mklittlefs@4.0.2-db0513a  
Configuring tool.  
esp32:mklittlefs@4.0.2-db0513a installed  
Installing platform esp32:esp32@3.3.2  
Configuring platform.  
Platform esp32:esp32@3.3.2 installed
```

Show hidden icons

**Set Up
Arduino IDE**

**Install
RTSP Server**

Select Board

LIBRARY MANAGER

Filter your search...

Type: All

Topic: All

AIPLC_Opta by Arduino

Arduino IDE PLC runtime library for
Arduino Opta This is the runtime
library and plugins for supporting...

[More info](#)

1.2.0

INSTALL

AIPLC_PMC by Arduino

Arduino IDE PLC runtime library for
Arduino Portenta Machine Control
This is the runtime library and...

[More info](#)

1.0.6

INSTALL

Arduino Cloud Provider**Examples** by Arduino

Examples of how to connect various
Arduino boards to cloud providers

[More info](#)

1.2.1

INSTALL

Arduino Low Power by

sketch_nov2a.ino

```
1 void setup() {  
2   // put your setup code here, to run once:  
3  
4 }  
5  
6 void loop() {  
7   // put your main code here, to run repeatedly:  
8  
9 }  
10
```

Output

```
Installing esp32:openocd-esp32@v0.12.0-esp32-20250707  
Configuring tool.  
esp32:openocd-esp32@v0.12.0-esp32-20250707 installed  
Installing esp32:esptool_py@5.1.0  
Configuring tool.  
esp32:esptool_py@5.1.0 installed  
Installing esp32:mklittlefs@4.0.2-db0513a  
Configuring tool.  
esp32:mklittlefs@4.0.2-db0513a installed  
Installing platform esp32:esp32@3.3.2  
Configuring platform.  
Platform esp32:esp32@3.3.2 installed
```


LIBRARY MANAGER
rtspe: All
c: All**ESP32-RTSPServer** by

KookyMarvin @RjSachse

An RTSP server library for streaming video, audio, and subtitles. This library allows you to easily create an RTSP

[More info](#)

1.3.5

INSTALL

Sensirion UART SPS30 by

Sensirion

Library for the SPS30sensor by Sensirion Enables you to use the SPS30 sensor via UART using the...

[More info](#)

1.0.1

INSTALL

sketch_nov2a.ino

```
1 void setup() {  
2   // put your setup code here, to run once:  
3  
4 }  
5  
6 void loop() {  
7   // put your main code here, to run repeatedly:  
8  
9 }  
10
```

Output

```
Installing esp32:openocd-esp32@v0.12.0-esp32-20250707  
Configuring tool.  
esp32:openocd-esp32@v0.12.0-esp32-20250707 installed  
Installing esp32:esptool_py@5.1.0  
Configuring tool.  
esp32:esptool_py@5.1.0 installed  
Installing esp32:mklittlefs@4.0.2-db0513a  
Configuring tool.  
esp32:mklittlefs@4.0.2-db0513a installed  
Installing platform esp32:esp32@3.3.2  
Configuring platform.  
Platform esp32:esp32@3.3.2 installed
```

Select Board

LIBRARY MANAGER

rtsp

Type: All

Topic: All

ESP32-RTSPServer by

KookyMarvin @RjSachse

1.3.5 installed

An RTSP server library for streaming video, audio, and subtitles. This library allows you to easily create an RTSP server.

[More info](#)

1.3.5

REMOVE

Sensirion UART SPS30 by

Sensirion

Library for the SPS30 sensor by Sensirion Enables you to use the SPS30 sensor via UART using the...

[More info](#)

1.0.1

INSTALL

sketch_nov2a.ino

```
1 void setup() {  
2   // put your setup code here, to run once:  
3  
4 }
```

```
5  
6 void loop() {  
7   // put your main code here, to run repeatedly:  
8  
9 }
```

10

Output

```
Downloading ESP32-RTSPServer@1.3.5  
ESP32-RTSPServer@1.3.5  
Installing ESP32-RTSPServer@1.3.5  
Installed ESP32-RTSPServer@1.3.5
```

Remove Option Confirms Installation