

TINY Machine Learning KIT

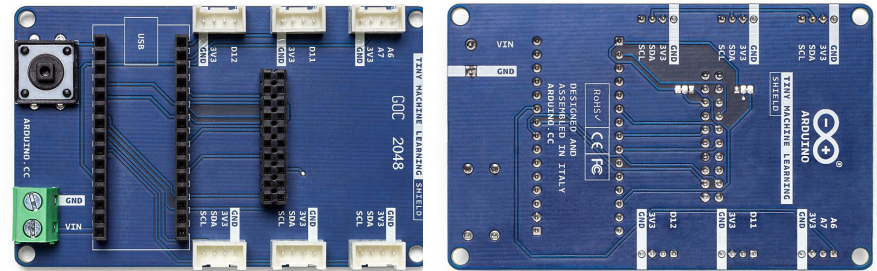
Ever wondered how to build a small intelligent device that reacts to sounds like a keyword being spoken, recognizes gestures like waving a magic wand, or even recognize faces? With this advanced kit you can do all of that and much more - and it's simple to use.

All you have to do is create and program your tiny model, then train it using the intuitive software. Once that's done, it executes your commands!

What's in the kit?

- A powerful board equipped with a microcontroller and a wide variety of sensors (**Arduino Nano 33 BLE Sense**) that sense movement, acceleration, rotation, temperature, humidity, barometric pressure, sounds, gestures, proximity, color, and light intensity.
- A camera module (OV7675) and custom Arduino shield to attach your components and create unique TinyML projects.

University students can use the kit to explore practical ML use cases using classical algorithms as well as deep neural networks powered by TensorFlow Lite Micro.



TINY Machine Learning KIT

Arduino content NOT included

COURSE 1

- Understand what machine learning (ML) is
- Deep learning and embedded machine learning
- Understand neural networks
- Background responsibilities and Real Examples

COURSE 2

- Train your device using your own datasets
- Using external training models for your project
- Basics of AI, real user cases and scenarios
- Know and play with some of the most used technics
- Real world industry applications

COURSE 3

- Hardware basics
- Code your own projects with TinyML
- Train your TinyML device
- Deploy, test, and correct your TinyML projects

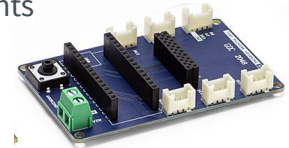


Arduino Nano 33 BLE Sense

- Senses: movement, acceleration, rotation, temperature, humidity, barometric pressure, sounds, gestures, proximity, color, and light intensity.



Custom Arduino shield to attach your components



Camera module (OV7675)



External content:

- There is **NO Arduino content** for this kit
- Use the freely available content & courses from [Harvard University at EdX](#) (content will be made public in March, when no login will be needed)

Arduino IDE
Tensor Flow
Google Collab

