



TALLER



28 FEBRERO

# MANOS A LA OBRA: ROBÓTICA E INTELIGENCIA ARTIFICIAL PARA EL AULA



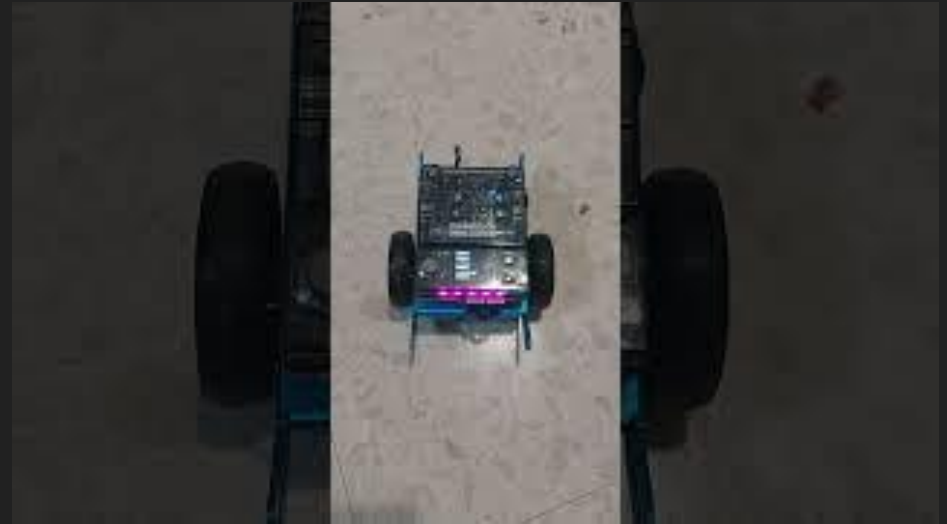
# IA

Navegando  
hacia el  
futuro

JAVIER QUINTANA

# Con mBot +Cognitive Services

[https://libros.catedu.es/books/cyberpi-y-mbot2/pag\\_e/maquinas-educadas-reconocimiento-de-voz-ordenes-a-mbot2](https://libros.catedu.es/books/cyberpi-y-mbot2/pag_e/maquinas-educadas-reconocimiento-de-voz-ordenes-a-mbot2)



# Con micro:bit + AI lens

<https://libros.catedu.es/books/cutebotai-lens/page/senales-de-traffic>

```
forever
  Get one image from AI-Lens
  if Image contains traffic card(s): Forward then
    Set left wheel speed velocidad % right wheel speed velocidad %
  +
  if Image contains traffic card(s): Turn left then
    Go Left at speed 30 % for 0.5 seconds
    Set left wheel speed velocidad % right wheel speed velocidad %
    repeat 3 times
    do Get one image from AI-Lens
  +
  if Image contains traffic card(s): Turn right then
    Go Right at speed 30 % for 0.5 seconds
    Set left wheel speed velocidad % right wheel speed velocidad %
    repeat 3 times
    do Get one image from AI-Lens
  +
  if Image contains traffic card(s): Stop then
    Stop car immediatly
  +
```



# Con micro:bit + CreateAI

<https://libros.catedu.es/books/microbit/page/entendiendo-a-mi-peluche>



micro:bit | CreateAI Data samples Save

Action Data samples

jumping 8 samples recorded

rolling 8 samples recorded

sleeping 8 samples recorded

+ Add action

Live data graph Disconnect

Train model

on ML jumping start

show icon [jumping icon]

play giggle until done

on ML rolling start

show icon [rolling icon]

play melody [melody] at tempo 448 (bpm) in background

on ML sleeping start

show icon [sleeping icon]

play twinkle until done

on ML unknown start

clear screen

on ML jumping stop

stop all sounds

on ML rolling stop

stop all sounds

on ML sleeping stop

stop all sounds












- **Echidna**

- [LearningML](#) NoPT ML ❤️  

- **Microbit**

- [CreateAI](#) NoPT ML ❤️  (aunque se precisa de  para su entrenamiento)
- [LearningML](#) NoPT ML ❤️  
- [Cutebot + AI Lens](#) PT ML  
- [Teachable Machine Google](#) NoPT ML  

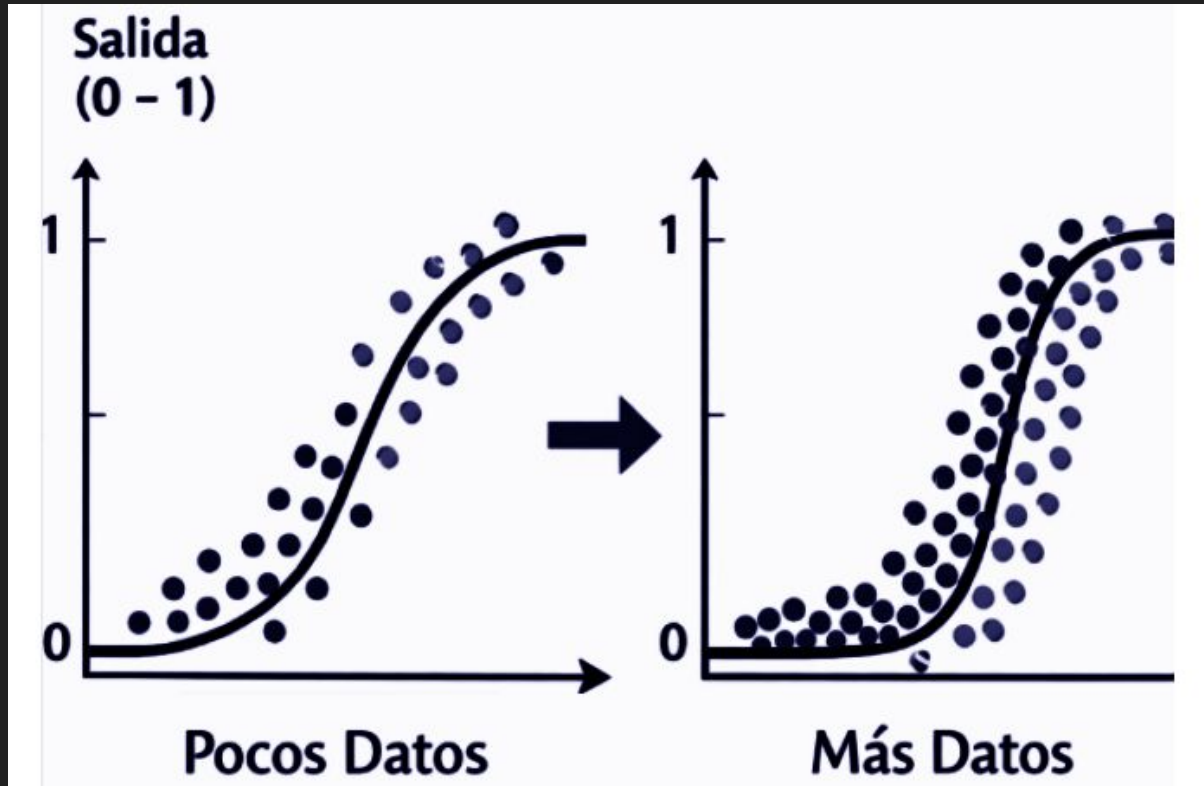
- **Makeblock: mBlock mBot1, CiberPi, mBot2**

- [Traductor](#) PT ML  
- [Cognitive Services](#) PT ML   
- [Reconocimiento de voz](#) PT ML  
- [Teachable Machine](#) NoPT ML  
- [Smart Cámara](#) NoPT ML  

- **CrowPi**

- [Crowpi AI- Face Recognition](#) NoPT ML (Python) 

# Función Signoide

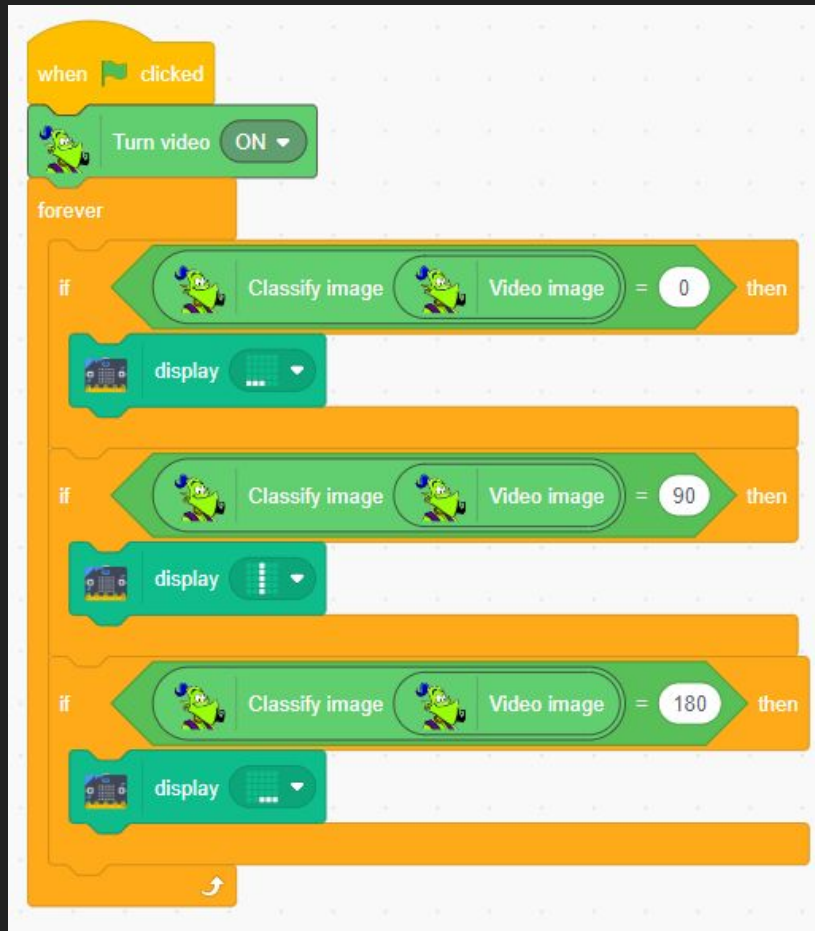


# MANOS A LA OBRA

The screenshot shows the EchidnaML application interface. At the top, a dark grey header contains the text "Welcome to EchidnaML (1.0.9)" and "EchidnaScratch and LearningML in your computer". On the right side of the header, there are icons for a globe and an "Exit" button. Below the header, the interface is divided into two main sections. The left section, titled "EchidnaScratch", features a large orange circle with a white cat silhouette. A yellow circle labeled "1" highlights the text "Echidna board connected" in a green box. Below this, there are two buttons: "Open EchidnaScratch" and "Open LearningML", both highlighted with yellow circles and labeled "3" and "2" respectively. The right section, titled "Machine Learning Models", contains a green circle with a white echidna silhouette and two graphs. The first graph, labeled "Salida (0-1)", shows a scatter plot of data points with a fitted curve. The second graph, labeled "Pocos Datos" and "Más Datos", shows the same data points with a different fitted curve. A yellow arrow points from the "Echidna board connected" text to the echidna silhouette. At the bottom, a light blue footer contains the text "EchidnaML® copyright by LearningML and Echidna Educación. The source code is licensed GNU GPL-3." and a small window icon labeled "electron.app.EchidnaML".

TUTORIAL : <https://libros.catedu.es/books/echidna>

# Y con micro:bit



**TUTORIAL** : <https://libros.catedu.es/books/microbit>

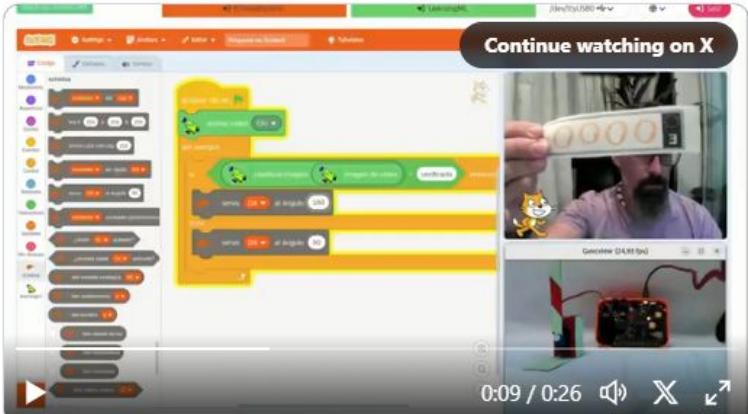
# RECONOCIMIENTO DE MATRÍCULAS

 **Jorge Lobo**  
@lobo\_tic · [Follow](#)

—Antes, para salir del parking del supermercado, había que escanear el ticket de compra, pero ahora la barrera se abre sola como si supiera que ese coche puede salir.

—¿Queréis saber cómo lo sabe?

Así surge la idea de esta actividad con [@EchidnaSTEAM](#) y [@\\_learningml\\_](#) 😊



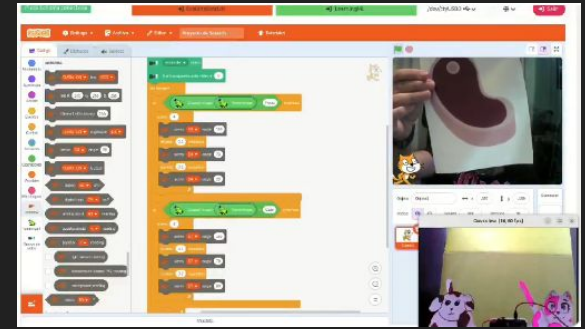
The screenshot shows a video player interface. On the left, there is a Scratch script with several 'when green flag clicked' events, each followed by a 'say' block. The main video area shows a man holding a license plate with the number '0000'. Below the video, there is a 'Continue watching on X' button and a progress bar showing 0:09 / 0:26.

[https://x.com/lobo\\_tic/status/1923996982516814064](https://x.com/lobo_tic/status/1923996982516814064)

¿Te atreves a hacer un videoportero inteligente?

**TUTORIAL** : <https://libros.catedu.es/books/echidna>

# RECONOCIMIENTO DE IMÁGENES



<https://x.com/i/status/1891063031083217014>



<https://x.com/i/status/1858999814916370902>

**TUTORIAL :** <https://libros.catedu.es/books/echidna>

# RECONOCIMIENTO DE TEXTOS



Echidna Educación

ASISTENTE VIRTUAL CON  
MACHINE  
LEARNING  
Y ECHIDNAML

[www.echidna.es](http://www.echidna.es)  [echidnaesam](https://twitter.com/echidnaesam)

TUTORIAL : <https://libros.catedu.es/books/echidna>

# PARA CUALQUIER DUDA... [www.catedu.es](http://www.catedu.es)



WhatsApp  
Telegram  
623197587

TUTORIALES