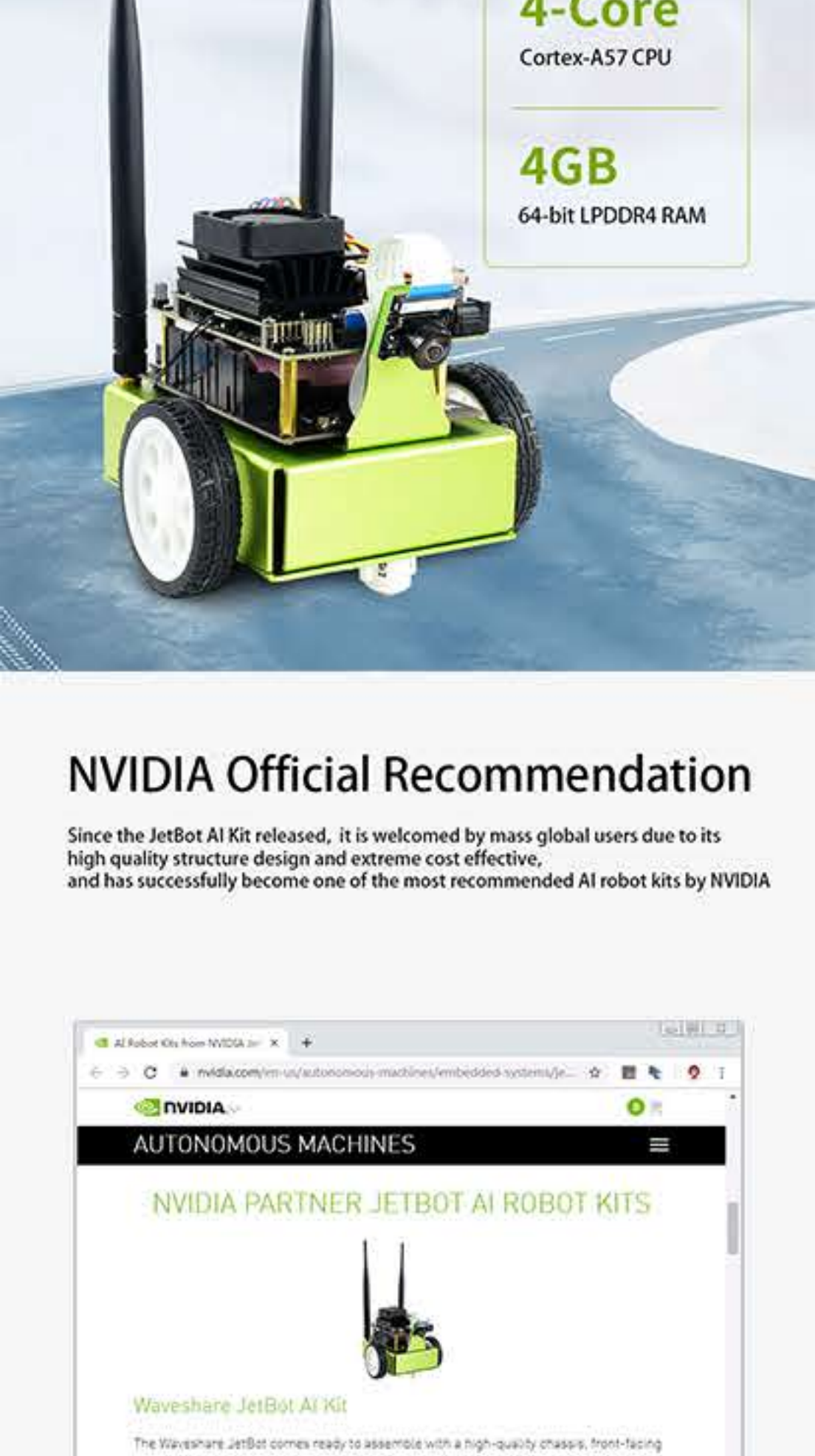


# JETBOT AI KIT

## AI-Based Smart Robot

An Open-source AI Robot Based on NVIDIA Jetson Nano



**128-Core**

GPU Graphic processor

**4-Core**

Cortex-A57 CPU

**4GB**

64-bit LPDDR4 RAM

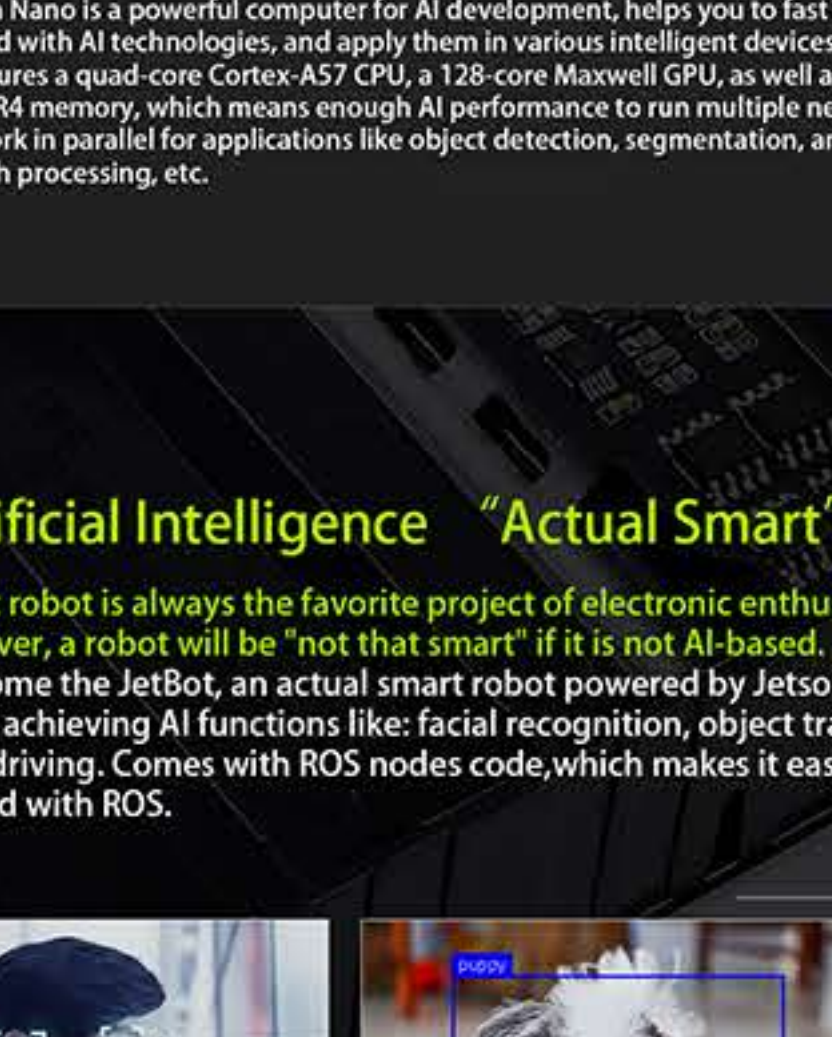
## NVIDIA Official Recommendation

Since the JetBot AI Kit released, it is welcomed by mass global users due to its high quality structure design and extreme cost effective, and has successfully become one of the most recommended AI robot kits by NVIDIA



## JETSON NANO

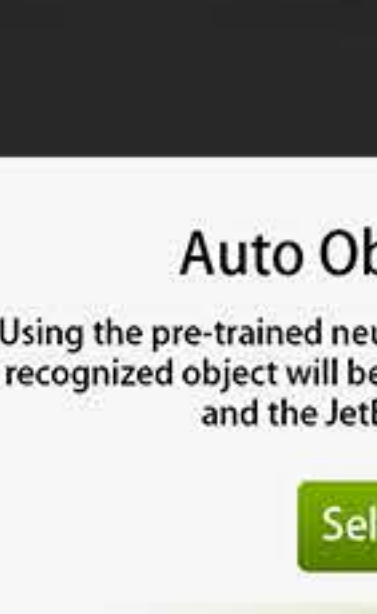
More powerful AI on the edge



Jetson Nano is a powerful computer for AI development, helps you to fast get started with AI technologies, and apply them in various intelligent devices. It features a quad-core Cortex-A57 CPU, a 128-core Maxwell GPU, as well as 4GB LPDDR4 memory, which means enough AI performance to run multiple neural network in parallel for applications like object detection, segmentation, and speech processing, etc.

## Artificial Intelligence "Actual Smart"

Smart robot is always the favorite project of electronic enthusiasts, however, a robot will be "not that smart" if it is not AI-based. Welcome the JetBot, an actual smart robot powered by Jetson Nano. Easily achieving AI functions like: facial recognition, object tracking, auto driving. Comes with ROS nodes code, which makes it easy to get started with ROS.



Facial Recognition



Object Classify

## Auto Road Following & Collision Avoidance

Collect data via camera by taking enough images of different conditions, use the data to train the neural network, combined with AI algorithm, finally achieves auto collision avoidance on multi environments.



## Auto Object Tracking

Using the pre-trained neural network, select target object, the recognized object will be displayed on webpage in real time, and the JetBot will keep tracking it.

Select a target

◀ human | tennis ball | animal ▶



## ROS (Robot Operating System)

Comes with ROS nodes code, easy to get started with ROS, learn the ROS system framework and concept



## ROS

The Robot Operating System (ROS) is a flexible framework for writing robot software. It is a collection of tools, libraries, and conventions that aim to simplify the task of creating complex and robust robot behavior across a wide variety of robotic platforms. The ROS is one of the most popular robot software framework in the world.

## Highly Integrated JetBot Expansion Board

No Messy Wiring, Simple Assembly



## 8MP 160° FOV Camera

Sony IMX219 Sensor, 3280×2464 Resolution  
Facial Recognition, Object Classify, Real Time Monitoring



## Dual Mode Wireless NIC AC8265

High Speed WiFi Connectivity,  
Stable Bluetooth Communication, Low Latency



## Wireless Gamepad Easier Teleoperation

Wireless Communication, Plug & Play

