

Learning route

1.The Learning Path for Jetson Orin nano Motherboard

1. This product provides factory images, which can be plugged into the motherboard using the included **solid-state drive** in the package. There is no need to repeatedly burn the images according to this tutorial. For detailed image environment, please refer to the documentation in the attached image. If you burn the official image of Jetson Orin nano, you need to build your own AI environment. Due to software version differences, errors may occur and you need to find a solution on your own. Please refer to the method for burning images2.**Basic Settings**

2. After you burn other third-party images and successfully boot them. If you want to perform some simple configurations on Jetson Orin nano, such as:

- NVME expansion
- Ssh VNC login
- Transfer files between windows and jettson orin nano
- Increase the space of Jetson orin nano
- System backup and other operations

You can watch **3.System Setting**

3.When you want to understand the usage of the GPIO port of Jetson Orin nano and have a certain foundation in Python, you can watch it**Chapter 4 GPIO Hardware Control Tutorial**

4.When you want to learn artificial intelligence vision, you can watch**5.AI visual advanced tutorial**

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5.1 Test camera

5.2 Install Jupyterlab and Jetch...

5.3 Install TensorFlow

5.4 Install Torch&&Torchvision

5.5 Jetson reference construct...

5.6 Hello AI world

5.7 Image classification infere...

5.8 Train image classification ...

5.9 Target detection inference

5.10 Training object detection ...

5.11 Semantic segmentation

5.12 Action recognition

5.13 Pose estimation

5.14 Background removal

5.15 Monocular depth estimation

5.16 DeepStream construction

5.17 Vehicle inspection

5.18 Attitude detection

5.19 Introduction to YOLO5

5.20 YOLO5 construction

5.21 Yolo5 Real time detection

5.22 YOLO5+TENSORRT acc...

5.23 Yolo5+Tensorrt accelerati..

5.24 Mediapipe environment

5.25 Mediapipe development

Each box with a different color is a part, and each part is dependent on the previous part and is rarely separate. If the previous environment is not set up properly, an error will be reported, and using our set up image can directly run the AI case inside.

5. When you want to learn ROS system courses, you can watch **6.ROS advanced tutorial**. After mastering ROS knowledge, you can purchase our ROS accessories for advanced learning. The image we have built also has the corresponding ROS accessory source code.