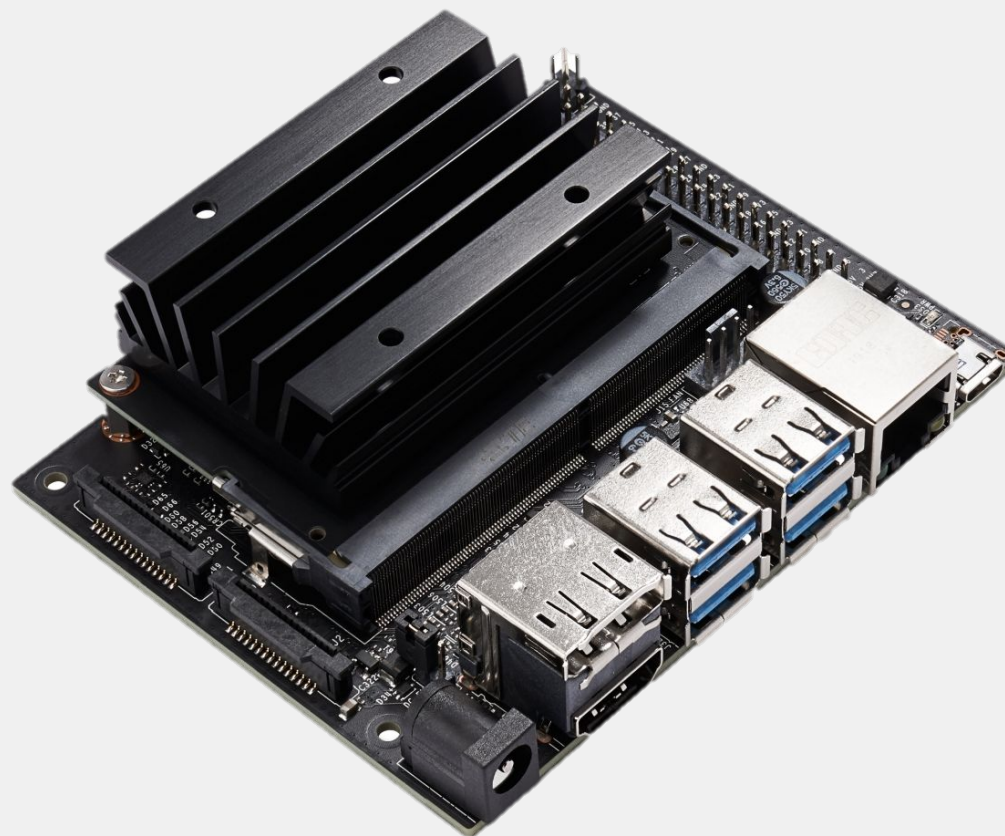


# Setting up AI

# NVIDIA JETSON



# Content

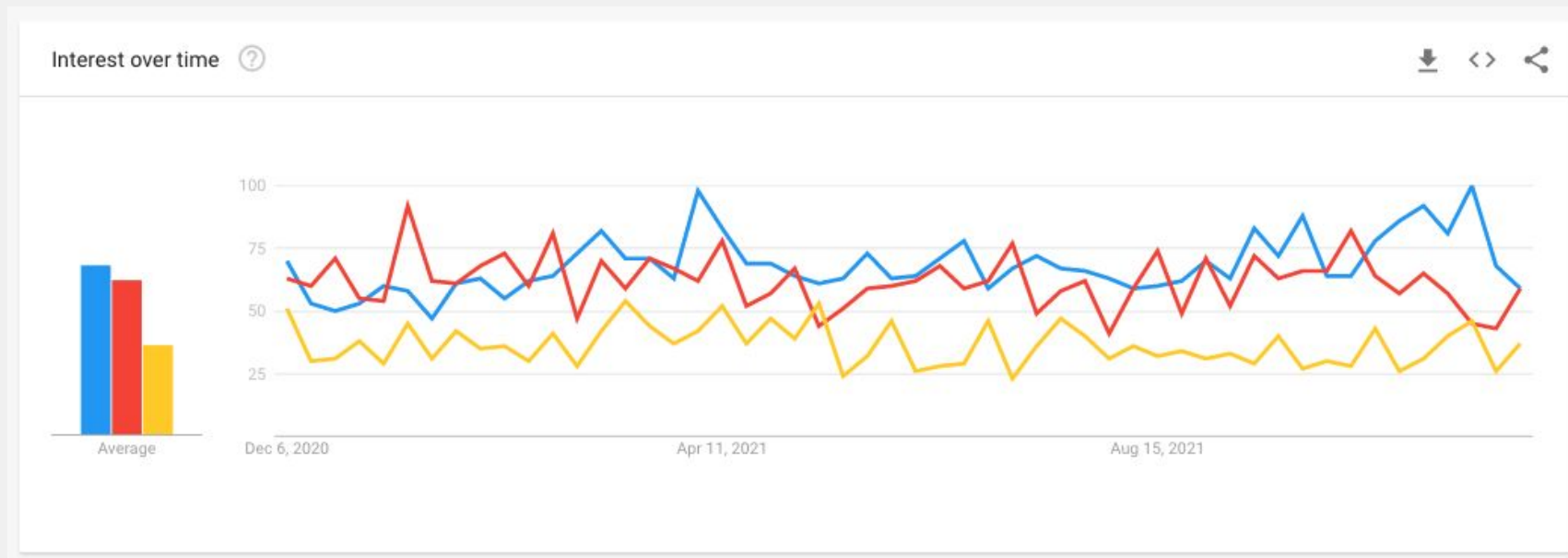
- Discussion about some useful libraries
  - OpenCV, PyTorch etc.
- Installing **Python** and other supporting libraries
- **OpenCV** installation with **CUDA** support
- **PyTorch** and **TorchVision** Installation

# Open Source Computer Vision (OpenCV)

- Open source library for Computer Vision problems
- First released in 2000
- Latest version available is 4.5.4
- Over 2500 algorithms (classic + state-of-the-art)
- Enabled with CUDA Support

# PyTorch

- Powered by **Facebook**
- First released in **September 2016**
- Most popular **Deep learning** library
- Easy to use as compared to **TensorFlow**
- Allows to customize the **low-level** functions



- **PyTorch**
- **Tensorflow**
- **Keras**

# TorchVision

- Part of **PyTorch** designed for the **Computer Vision** tasks
- Comes with **GPU** support.
- Contains many popular image **Datasets**
  - **MNIST, CIFAR, COCO, ImageNet etc.**
- Contains several **pre-trained models**
  - **ResNet, Inception, GoogleNet etc.**

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# Move to Jetson