AUGMENTED STARTUPS
Computer Vision | AI | Robotics

Setting up AI
NVIDIA JETSON

Content

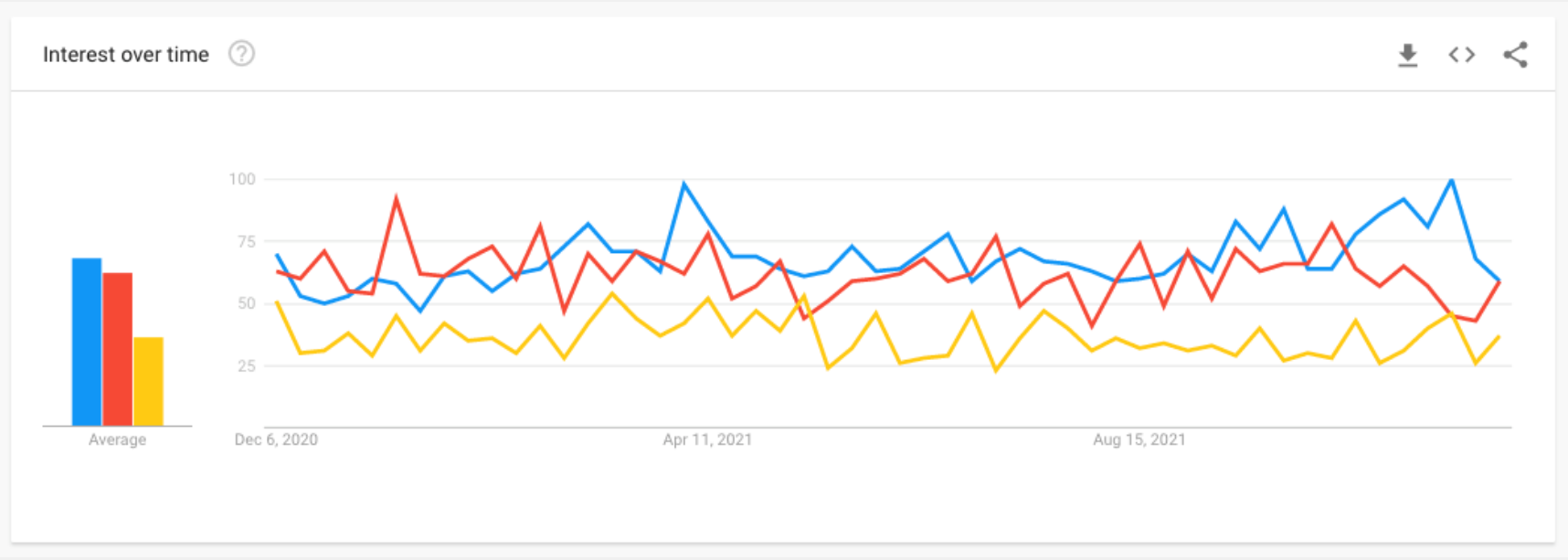
- Discussion about some useful libraries
  - OpenCV, PyTorch etc.
- Installing Python and other supporting libraries
- OpenCV installation with CUDA support
- PyTorch and TorchVision Installation

Open Source Computer Vision (OpenCV)

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

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



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.

Move to Jetson