

Open Source Framework

AI and machine learning make it possible for the machines to inherit new functionalities through the process of learning. Similarly to small kids, machines can gain the ability to acquire and understand visual information by processing massive amounts of images. To process so much data faster without compromising the final result, developers use image processing models based on machine learning and deep learning algorithms. In particular, image processing and computer vision solutions use deep learning for accomplishing such complex tasks as:

- Image classification
- Object recognition

OpenCV

Open Source Computer Vision Library (OpenCV) is one of the most popular open source services for image processing. It's a free computer vision library that you can use to perform various image processing tasks. The library includes numerous algorithms and functions as well as special modules aimed at image processing tasks. Starting from the library version 3.1, there's also a deep learning module for building and training deep learning models.

With this module, you can use OpenCV to extract features from processed images, and then apply a machine learning model using one of the supported machine learning frameworks.