**Computer Vision :**

Open CV is an open source library (see: <http://opensouces.org>) computer vision library available <http://sourceForge.net/Projects/opencvlibrary>. The library is written in C an C++ and runs under Window, Linux, and Mac OS X. There is active development on interfaces for python,Ruby,Matlab and other language.

Open CV was designed for computational efficiency and with a strong focus on real time application. OpenCV is written in optimized C and can take advantage of multicore processor.

Open CV main goal is to provide a simple to use computer vision infrastructure that helps people build fairly sophisticated vision application quickly. OpenCV library contains over 500 function that span many area in vision, including factory product inspection,medical imaging,security, user interface,camera calibration and robotics. OpenCV also contain full,general purpose Machine learning library.

Computer vision is the transformation of data from still or video camera into either a decision or a new representation. All such transformation are done for achieving some particular goal. The input data may include some contextual information such as the camera is mounted in a car or laser range finder indicates an object is 1 meter way. The decision might be “there is a person in this scene “ or “there are 14 tumor cell on this slide”.A new representation might mean turning a color image to a grayscale image age or removing camera motion from an image sequence.

<https://books.google.ca/books?hl=en&lr=&id=seAgiOfu2EIC&oi=fnd&pg=PR3&dq=computer+vision+with+the+opencv+library&ots=hUG8afjBN9&sig=5-ygSPco-0195GM9VVVgMyIauks#v=onepage&q=computer%20vision%20with%20the%20opencv%20library&f=false>

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