**A Report on**
**Two days Workshop on Python and OpenCV on**
**15th & 16th July-2017**
**Organized by**
**Electronics & Communication Engineering Department,**
**Sarvajanik College of Engineering & Technology**

Electronics & Communication Engineering Department had organized Two days workshop on "Python, OpenCV and RaspberyPi" for the B.E. Electronics & Communication Final year and Pre-final year students on 15th -16th July, 2017 . This workshop was organized under the banner of Signal processing Society, IETE, IEEE Student branch. This was the first workshop being organized for Signal and Image processing (SIP club).

The motive of this workshop was to gain the knowledge about current trends in Image and Video processing with the usage on new tool which is compatible with industrial environment. Around 23 students of final year and 8 students of Pre-final year and 2students of ME second year of Electronics & Communication Engineering department have participated. The workshop title has been in great demand in other faculties too. Here we have tried to fulfill the expectation of the students by giving them hands on experience and showed applications of the said workshop topic.

The topics discussed in the workshop were quite useful for UG and PG students' project and research work. New development in image and video processing are providing novel ways for sensing and interacting with the world around us and with each other, helping us make sense of increasingly large volume of data that we can gather and access and enabling mobility.

The first session of the workshop was the installation of Anaconda and Open CV software by the students themselves. In the first half basic introduction about python along with programming and coding techniques were taught. The students performed some of the python programs themselves from the handout examples provided to them.

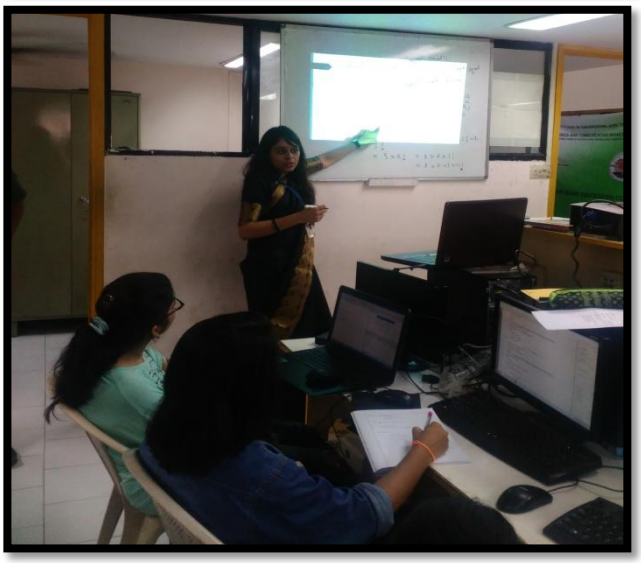
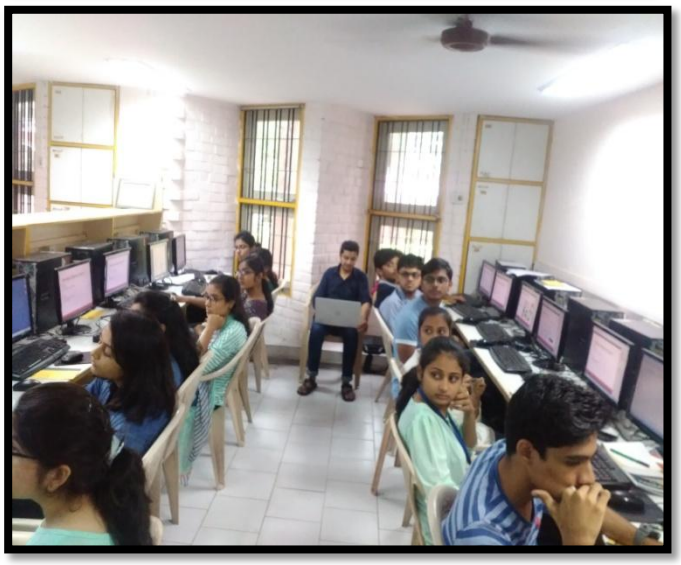
In the second half students were taught about introduction to image processing and various techniques like compression, morphology etc. Students were given adequate time to run the example codes on MATLAB as well as Anaconda.

The second session of the workshop was mainly concerned with Open CV basics and programming. They implemented the handout programs provided to them before hand and had enough practice. Students were taught how to interface real time camera and perform face detection, inversion etc. At the end they were also guided about raspberry-pi interfacing with inbuilt pi camera for live video streaming.

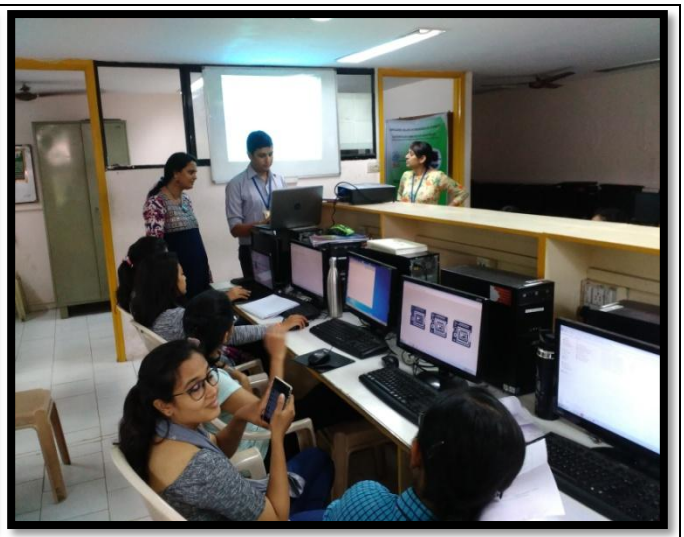
**Glimpses of Workshop**

**First Session (Day 1:15/7/2017)(Saturday)**



## Second Session(Day 2: 16/7/2017)(Sunday)



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