
(A36607) COMPUTER VISION LAB**B.Tech CSE(AI&ML)****LAB EXPERIMENTS**

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Note: Use any tool like OpenCV/ Scilab

1. Write programs for the following
 - a) Loading and displaying an image.
 - b) Reading and writing video files.
 - c) Image enhancement.
2. Write a code for basic Statistical Analysis of Images(To find sum , average , standard deviation , min and max)
3. Write a program study contrast adjustment of a given image
4. Write a code to apply Different Filtering Operations on Images.
5. Write a code to apply morphological operations like dilation, erosion, opening and closing on the given image.
6. Write a code for detection of an edge / curvature in a given image and curve fitting
7. Write a code to implement SURF / SIFT / HOG detector
8. Implement histogram calculation and equalization for the given image.
9. Write a code to perform 2-D spatial transformation to image
10. Convert the input image from RGB color space to CMY and HSV color space.
11. Write a code for feature Extraction from Images.
12. Write a code for basic Shape Analysis of an image.
13. Write a program to reduce dimensionality using PCA for the given images.
14. Write a code for object detection using Hough transform / Template matching.
15. Object classification using SVM / Adaboost classifier .
16. Object tracking using Kalman filter approach.
17. Face Detection Algorithm Implementation.