Pattern Recognition and Machine Learning

Minor Course Project Readme File

Project Title

Face mask detection

Team Members

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How to get to our project

- Download the .ipynb file provided in the zip folder.
- Open google colaboratory on any web browser.
- Upload that ipynb file on that collab note book.
- Load the zipped dataset folder into the colab notebook.
- Create a new empty folder named “Dataset” as in order to unzip the folder and extract all the data from that, all the dataset should be stored in a newly created new empty folder named “Dataset”.
- You can see all the code in blocks and their results
- If you want to re-run the code then press ctrl+enter to run a particular block and ctrl + F9 to run the whole colab notebook at once.

Structure and Process of Execution

- Our project is on Face masked detection which
- We tried different classifiers and finally used three different classifiers which are K nearest neighbour, Multilayer Perceptron and Support vectors machines.

- We used different methods to increase the accuracy of the classifiers by using grid search over different parameters to find the best parameter to be fitted in the model.
- Structure : Program consists of 3 models,K nearest neighbour, Multilayer Perceptron and SVM
- The best result Comes out for the SVM model which is approx 98% followed by KNN which is 87% followed by MLP.

----------THE END----------

Thanking You

Course Instructors

Dr. Richa Singh, Dr. Yashasvi Verma, Dr. Romi Banerjee