Minimum Viable Product

Abstract: -

This system was proposed primarily to enhance the established university attendance practices and prevent the waste of resources and time. The idea of switching from the traditional attendance system to the digital one using face detection and recognition techniques has been forced by the automation world's pointing-sides. By introducing the dataset of an individual, the Student Attendance structure is developed in this way.

OpenCV –

A machine learning and computer vision software library is available for free under the name OpenCV. Open-Source Computer Vision Library is how OpenCV is formally referred to. It was developed to speed up the incorporation of machine perception into consumer goods and to offer a shared infrastructure for computer vision applications.

A digital image is one that is made up of picture components, also referred to as pixels, each of which has a discrete, finite amount of numeric representation for its level of intensity. The computer interprets an image as a collection of numerical values for these pixels, and in order to identify a particular image, it must find patterns and regularities in this numerical data.

We used two sets of models in our MVP, first one is the training dataset, where we have put the images where the data will be recorded, and the test dataset, where we have put the images we must extract the attendance from. After comparing the two data sets system will give us a list of attendance and a list of absences, and also, if any new image is detected that is in the test data set but not in the train data set system will recognize that person and print 'there is a stranger in class, be carful"

We have submitted our code through GitHub, please look into it.

Thank you,

Amin Yousefian

Triza Killu

Ritvij Sharma

Nasar Ul Islam