## **ABSTRACT**

The face recognition is one of the biometric methods to identify individuals by features of the face. A complete face recognition includes two patterns of face detection and face recognition. And these can be achieved using machine learning techniques. A problem of personal verification and identification is an actively growing area of research and security areas. Wide Resnet (WRN) classifier and Binary Classification is used for age and gender classification. Image processing is a method to perform some operations on an image, in order to get an enhanced image or to extract some useful information from it. It is a type of signal processing in which input is an image and output may be image or characteristics/features associated with that image. Nowadays, image processing is among rapidly growing technologies.

It forms core research area within engineering and computer science disciplines too. Image processing is of two types namely digital and analog. In this system we are using digital image processing. Facial features are considered as high level personal trait in the field of security, law enforcement application and attendance systems. Certain applications uses facial features to unlock and to detect the right person identification. Irrespective of age and position of an individual the gender of an individual has to be detected. The main problem in detection of faces is inappropriate dataset of training examples which may lead to less accuracy.

## **ACKNOWLEDGMENT**

At the very onset we would like to place our gratefulness to all those people who helped us in making this project a successful one.

Coming up, this project to be a success was not easy. Apart from the shear effort, the enlightenment of our very experienced teachers also plays a paramount role because it is they who guide us in the right direction.

First of all, we would like to thank **Management of RNS Institute of Technology** for providing such a healthy environment for the successful completion of project work.

In this regard, we express our sincere gratitude to the Director **Dr. H N Shivashankar** and the principal **Dr. M K Venkatesha**, for providing us all the facilities in this college.

We are extremely grateful to our own and beloved Professor and Head of Department of Information science and Engineering, **Dr. M V Sudhamani**, for having accepted to patronize us in the right direction with all her wisdom.

We place our heartfelt thanks to **Mr. T S Bhagavath Singh**, Associate Professor, Department of Information Science and Engineering for having guided for project and all the staff members of our department for helping us out at all times.

We thank Mrs. Kusuma S and Mr. Rajkumar R, Project coordinators, Department of Information Science and Engineering. We thank our beloved friends for having supported us with all their strength and might. Last but not the least, we thank our parents for supporting and encouraging us throughout. We made an honest effort in this assignment.

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