**ABSTRACT**

Convolutional Neural Networks (CNNs) has been playing a significant role in solving Computer Vision problems. In most recent times, the Face Recognition technique is widely used in University automation systems, it has been one of the extensively. Facial recognition is a way of recognizing a human face through technology. The Conventional Facial Recognition system uses biometrics to map facial features from a photograph or video by comparing the information resides in the database to find a match. The significance of face recognition is due to its technical challenges and wide potential application in video surveillance, identity authentication, multimedia applications, home and office security, law enforcement and different human-computer interaction activities.

The rise of Deep learning has laid the path in solving a lot of problems in wide research areas, especially Convolution Neural Networks (CNNs) have achieved significant success in the area of computer vision by providing efficient solutions through different architectures.

The project proposes a novel CNN architecture for Face Recognition and a pipeline to develop an end-to-end facial recognition system which includes collecting real time data i.e., Human Faces, Pre-Processing, Model Training and Hyper Parameter Optimisation. Furthermore, developing a web application to post attendance using Face Recognition using the developed novel CNN model.