**STUDENT ATTENDANCE MONITORING SYSTEM BASED ON FACE BIOMETRICS USING CONVOLUTIONAL NEURAL NETWORKS WITH DEEP LEARNING TECHNIQUES**

**ABSTRACT:**

Personal identification is considered an important aspect in recognizing the identity of a particular individual. A person’s identity can be validated through the traditional or biometric methods. The application of biometric recognition in personal authentication enables the growth of this technology to be employed in various domains. The implementation of biometric recognition systems can be based on physical or behavioral characteristics, such as the iris, voice, fingerprint, and face. Currently, the attendance tracking system based on biometric recognition for education sectors is still underutilized, thus providing a good opportunity to carry out interesting research in this area. As evidenced in a typical classroom, educators tend to take the attendance of their students by using conventional methods such as by calling out names or signing off an attendance sheet. Yet, these types of methods are proved to be time consuming and tedious, and sometimes, fraud occurs. As a result, significant progress had been made to mark attendance automatically by making use of biometric recognition which uses the face biometric for authentication. Student details are registered and stored in database as in the form of feature values for security purpose. At the time of attendance tracking, admin verifies the student with unique Face biometrics. Face recognition can be done with the help of deep learning algorithm. It can be useful to avoid fake attendance and improve automated system in real time college environments. Experimental results shows that the real time interface with student details and will implement software framework

**Keywords: Face, Biometric, Recognition, Attendance, Deep learning, Authentication**