Abstract

One of the troublesome undertakings in Image Processing is accurately recognizing faces in videos, which consecutively offers less precision. Recognizing faces irrespective of the gender is an effortless task for humans; however, from a machine or a robot’s perspective, it is an entangled task. Identifying the gender of an individual using their voice is simple when contrasted with facial pictures. This kind of binary classification can be used in various applications, for example, a surveillance system, directed publicizing, demographic gathering, human-machine interaction, content-based indexing and searching, biometrics, and so forth. In order to detect faces with ranging accuracy, there are multiple methods proposed by researchers, yet no existing system can produce an accuracy of 100%. In this manuscript, an automated attendance system is built, to recognize faces from existing trained dataset of student images collected from live training. Along with Face Recognition, the system is equipped with second-level security of QR code scanning. At the testing stage, the experimental results exhibited a precision of 93.00% and an f1-score of 0.9.
References


Improved Intuitive Automated Attendance System using Unorthodox Algorithms


Index Terms

Computer Science Automated Systems

Keywords

Face Recognition, Images, Haar-feature classifier, face detection, Support Vector Machine, attendance, QR Code, f1-score, Local binary Pattern