ABSTRACT

The main goal of this project is to create an application for security purposes. Because of this, many individuals who may or may not know us are gaining access to our personal workspace. There are other difficulties, such as losing important papers and valuables. Even the most advanced technology, such as a fingerprint sensor lock, may be easily opened. As a result, we create an AI-based security room and locker system to address this issue. This project used artificial intelligence to discover and evaluate people, as well as track them using our ongoing initiative. We tackle the current system problem in the proposed work using LBPH (local binary pattern) and machine learning approaches to lower the recognition time of many items in less time. Using Media Pipe Algorithm we can predict models of person face and in metropolitan areas, security surveillance systems have become one of the most important components of security infrastructures. Robbery, violent assault, and theft are the top forms of crime tracked and prosecuted by security monitoring systems, according to statistics. Facial recognition has always gone through a consistent research area due to its non-modelling nature and its diverse applications. Today, computer vision is a comprehensive field that deals with a high level of programming by feeding the input images/videos to automatically perform tasks such as detection, recognition and classification. Even with deep learning techniques, they are better than the normal human visual system. In this article, we developed a facial recognition system based on the Local Binary Pattern Histogram (LBPH) method to treat the real-time recognition of the human face in the low and high-level images. We aspire to maximize the variation that is relevant to facial expression and open edges so to sort of encode edges in a very cheap way.