

ABSTRACT

Archer: Face recognition-based tracking and prediction system is a computer vision technology that uses AI algorithms to identify and track individuals based on their facial features. The system is designed to provide real-time location tracking by detecting and recognizing faces in video streams and using this data to predict future locations of selected individuals. The system is equipped with advanced facial recognition algorithms that can accurately detect and match facial features, even in challenging conditions such as low light and changing poses.

The proposed system can monitor and tracks people. It uses face recognition abilities to perform its functions. The system uses several CCTV and Security cams installed throughout the location to work. The live stream of footage from these cams are uploaded to the system and are broken down into frames. The system checks each frame for familiar faces and whenever it finds one, the system alerts the officials about the whereabouts of the person and saves the location and time stamp. Later, the saved data of locations and their time stamps are used to predict where they will be at a given time in the future. Currently there does not exist such a system. The proposed system can be used as a home security device to an anti-terrorist defence system for DOD.