Face Recognition-Based Door Locking System with OTP Verification

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Abstract: *In the world of the digital era, AI has had a major influence. With the advancement of technology, people can experience extraordinary innovations that not only make life more comfortable, but also make it simpler. As a part of AI, We have created a door locking mechanism that uses face recognition with OTP verification using Open CV. At the stage of identification of faces, the HOG algorithm is used for finding the face at the backend. This project is developed using both hardware and software. With the help of smart doorbells, home owners can get notifications when a visitor is at the door and identify the visitor. They enhance the development of smart homes and greatly improve people's quality of life. The purpose of this project is to make the home or office area secures and can also be used to minimize criminality. Only one form of authentication is offered by the existing systems, which makes them less secure. Thus, for secure access, we have proposed a safe door locking system with two factor authentication that can authenticate and validate the user as well as open the door in real time. We have come up with an idea which should recognize the guest, relatives or a stranger and alert the user*

Keywords: Doorstep security system, facial recognition, the authentication code, authentication, Open CV, Global system for mobile communication, residence safety