AI-GARAGE

AI-GARAGE which is a prototype of the smart garage door is one of the essential needs of a smart home. These doors not only help from burglars but also closes on its own as soon as it senses that someone took the car out. Unlike a manual garage door, the *AI-GARAGE* gives a tough time to the thieves for entering the house. Securing homes has become one of the concerning issues. Today homes are being more vulnerable for several threats especially being burgled. For this manner home security is needed. Home security implicitly means a secured mechanism for the door. So, providing a secured garage door system for houses has become a vital research. The goal is to implement a home security system by integrating some of the latest technology like AI,ML and IoT. *AI-GARAGE* provides the user with a simple monitoring system that enables them to act more security conscious, effectively increasing the safety and security of their home. The *AI-GARAGE* eliminates the need for carrying bulky keychains. All you need is to configure and integrate your smartphone with the home IoT network, and you can effortlessly open or close your garage door with just a few clicks of a button. With this system, only the authorized individuals can gain the permission to access the doors. Thus one can monitor his/her house from anywhere. *AI-Garage* also allows to reduce the fuel consumption by vehicle and reduce time wastage by providing easy access to unlock door and also electricity.

The main unique points of *AI-GARAGE* is that it is powered with a jetson nano super-fast GUI computer to give the based user experience. For the features like Facial-Recognition and the License-Plate-Recognition the User needs to put the information to the Jetson nano beforehand to make the system understand it's users.

Moreover the system can also control the garage door as well the garage lights with help of IBM-IoT and the app made using Node-Red services and MIT app inventor. We can also check the last picture captured by the system when the garage door was opened or when *AI-GARAGE* recognizes any face or license plate. We can also get the full access of the historic data-base storing all images captured at the time of opening the garage door in the IBM cloud's Object-Storage. Also there is a camera in the *AI-GARAGE* running 24/7 to give live feed to the user with an unique link created while running the garage and can only be accessible to the admin adding extra safety and security to the project.