

Two-layer Authentication System for Vehicles

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***Abstract:** Majority of the time, the automobiles used in crimes are stolen and can trick us into believing they are from services like Ola or Uber. We must enhance the number of car access systems to prevent such thefts and the crimes that go along with them. There are numerous authentication methods available on the market, including voice requests, drawing patterns, RF vehicle keys, biometric sensors, etc. One of the most significant and effective forms of authentication is face recognition. Thus, the goal of the proposed system is to use a dual verification method to verify drivers. Utilizing a biometric device in the car is how the first step of the authentication process is carried out. If it is completed successfully, the second step, which is the facial recognition module, will be activated to take a photo of the driver. To provide a facial recognition module, the system combines a Raspberry Pi 3a+ module and a Pi camera. The r307s module is used to offer biometric authentication.*

Keywords: Raspberry Pi 3a+ module, Pi Camera, r307s fingerprint module

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FIGURE REFERENCES

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