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Raspberry PI Vehicle Anti-Theft Face Recognition System

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Abstract: This is an advanced system that can be utilized in many cars. Today, it is not difficult to make duplicates of vehicle keys and using such keys increases the risk of robbery. For such problems, we hereby propose an efficient and reliable solution. Our system uses a face recognition system to identify the authorized users of the vehicles and only authorized users are allowed to use the vehicle. This allows for a fast easy to use the authentication system. The system uses a Raspberry Pi circuit, it also consists of a camera. When we turn on the system authority provided by 3 options that are registration, start, and clear data, while registering, it first scans the owner's face. After successful registration, the owner can start the vehicle. If an unauthorized user tries to use the car, the system scans the person's face and checks whether face matches with the authorized face, if it does not match the system denies. In this way, the system helps to secure such intelligent vehicles.

Keywords: Face recognition system(FRS), Raspberry Pi, message services, Global System for Mobile

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