

DIP Final Projects

FCVS - Feb23



Roll Call Application

(Using Face Recognition)

2500



Roll Call Application

Create a RollCall Application using the face image of the employees.

0. The application detects motion and prepares to take a photo.
 1. The person is placed in front of the camera and at a certain distance.
 2. The application detects the area of the face.
 3. Does the application detect whether the person in question is an employee or not?
 4. If the person is an employee, identify him and save the name, time and date of entry in the database. and then print on the monitor that **[(name and surname of the employee) welcome]**. If the person in question is not an employee, print that: **[Your profile is not registered, you are not allowed to enter.]**
- × The device administrator must be able to give the new employee's photo and name to the device and register him. (You can consider a folder for this and put the photos there and every time the program takes the photos and performs feature extraction and identifies the employee.)
 - × don't use deep models!

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Traffic Red-Light Running Violation Detection

3000



Traffic Red-Light Running Violation Detection

Create an Application for detecting Traffic Red-Light Running Violation

0. The camera sees the crosswalk. (you can use offline video)

1. If the light was red and a car crossed the line, its license plate is read and its license plate number stored in the database gets a negative score.

× Specify the color of the lights with the code. When the traffic light is red, the traffic light code is 0, when the traffic light is yellow, the light code is 1, and when it is green, the traffic light code is 2.

× don't use deep models!



Motion Detection

(Using surveillance camera)

1500



Motion Detection (Using surveillance camera)

Create an Application for real time motion detection using surveillance camera.

Whenever the camera detects a motion, it starts recording, and if the size of the moving object is greater than 0.2 resolution of the frames, the application notifies the administrator by SMS or email.