

S&S Project Write-up

Project Name: Reading text form an image using MATLAB

Project Members:

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Project Details: Today, we discussed with you our project in your office. We had decided to create a hearing aid using MATLAB, by applying filters to the incoming audio signal that would amplify the signal and also reduce the noise. But we found another interesting project (as stated above). We sincerely hope that you allow us to do this project instead of what we discussed with you.

Consider a car entering IIIT-Delhi through the college gate. The gate is closed initially. There is a camera that takes the image of the number plate of the car. Our project reads the text from the image and extracts the car's number. The car's number is, then, looked up through the directory of all the vehicles that are registered and are allowed to enter into the college premises, like the vehicles owned by the faculty, etc. If we find a match, the college gate opens automatically (with the help of some mechanism), otherwise it stays closed. Students' I-cards can also be read in a similar fashion.

The project is among the famous projects for Signals and Systems, and therefore, MathWorks has some significant support material for the same. (It is one of the very first links if we search the project through Google). However, we sincerely want to learn the method of extracting text from images. We want to learn about image processing with the help of MATLAB. There are a lot of things to learn about in this project. We hope that you like the idea. Moreover, we ensure you that there will be no plagiarism in the project.
