



# Location and Face Recognition Inform to Blind Person

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**Abstract:** We developed a mobile app to help blind people independently navigate their surroundings. The application utilizes the GPS (Worldwide Situating Framework), which assembles crude information for area arranges where visually impaired individuals are standing. Android then converts this address into a voice message, which the blind person then hears through a headset, checks the position address or location details from a database or Google API, and then processes these data to calculate real coordinates related to the current position. Our objectives are to make an application that is more affordable by utilizing less parts and easy to utilize so a visually impaired individual doesn't have to do something besides hear the voice message

**Keywords:** Machine Learning, Face Recognition, CNN

## I. INTRODUCTION

Our aim is to provide a talkative assistance to blind people we are going to develop a intelligent system. We focused on designing a android app for blind people this android app is used to help blind people to move with the same ease and confidence as a sighted people. It is not possible for every blind persons to buy costly product for their convenience. So it is better way to develop android app because its fully configure device with camera, GPS sensor, speaker MIC and display system

## II. LITERATURE REVIEW

The authors of the literature employed a variety of strategies to assist visually impaired individuals with navigation wherever else they require safety. For these reasons, the mechanisms in place had suggested numerous uses; filtering, deep learning, and convolution neural networks are the methods that are most frequently utilized (CNN). Advanced Research Journal in Science, Engineering, and Technology As a face recognition technique, the coding and decoding of the facial image using information theory is discussed.

### Hypothesis of Work

We can concentrate on every one of the difficulties we face there are a few hindered people groups. Therefore, we develop the efficient working Android app. We assemble the application for blind individual so they can confidently chipping away at general Climate Proposed work switched over completely to idea Quite possibly of the greatest trouble that visionaries experience is tracking down individuals. The increasing computational power of mobile devices is resulting in the development of applications that can assist the blind. The face recognition system that is being proposed is designed to work with mobile devices and has simple features that make it easier for blind people to use the system.

## III. EXISTING SYSTEM

The existing system or traditional system contains the Detection capturing a face a person in real time. converting the person known and unknown in to a represent of the face. Determining the location, under 10 miter also represent latitude or longitude.

## IV . METHODOLOGY AND EXPERIMENTATION

Location and face recognition inform to blind person project is based on computer vision techniques. Here are some steps that are followed for this project.

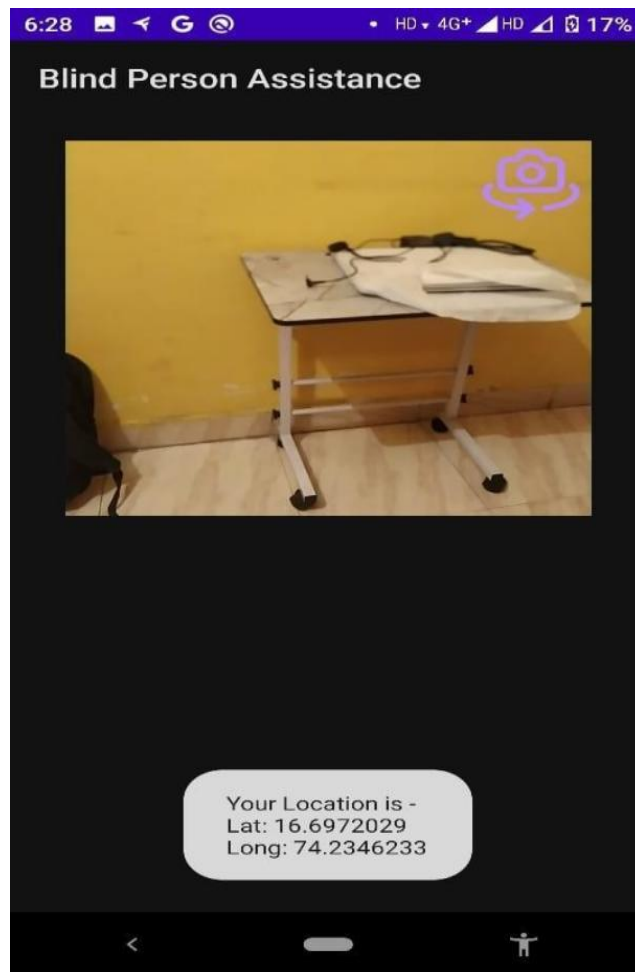
**1. Getting Location of Blind Person:** In this module, fetching the coordinates of Blind Person throw mobile app from Google Map at background so that it should not affect any other activities of device. By the time when device changes its location it will fetch the co-ordinates and sends these co-ordinates to the Server. These co-ordinates are in terms of longitude and latitude



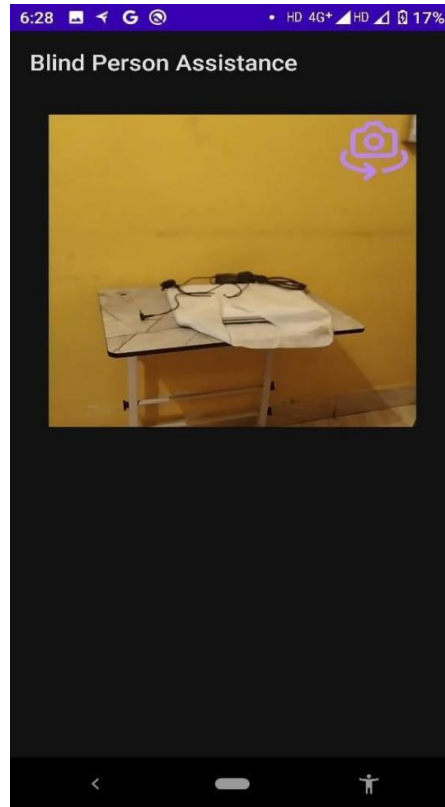
2. **Get location Address:** . After getting the co-ordinates, call to the Google location API. To get the address of locations where Blind Person is stand. After calling Google location API provide address of location. some time address not getting because Google location API not contain all address of all places
3. **Capture Frame from camera:** In this module we capture real time frame(images) from camera.
4. **Detect Face from Frame and Generate ML model:** After capturing frame detect face from frame and store in database with her name and also generate the ML model to recognize further.
5. **Face recognition:** In Face recognition face recognize throw face ML model  
**Text to Voice:** after Face recognition get person name and its also inform using text to voice if in face recognition person not detected then inform unknown person throw voice.

## V. RESULTS AND DISCUSSIONS

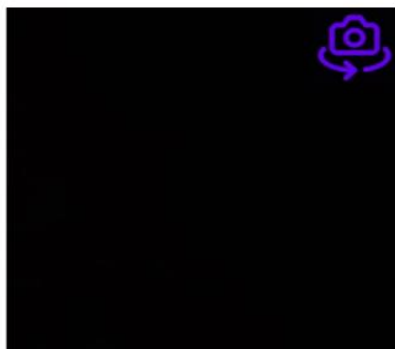
Various metrics, such as precision, recall, and F1 score, which measure the system's ability to accurately identify and track vehicles on the scene, can be used to evaluate the results of a vehicle detection and tracking system. Also, the framework's exhibition may be estimated regarding handling speed, memory use, and other specialized factors. Conversation of the outcomes could zero in on regions where the framework performed well, as well as regions where it battled or fizzled. The use of more advanced object detection or tracking algorithms, the optimization of the system's parameters, or the incorporation of additional data sources or sensors might also be topics of discussion In general, vehicle identification and global positioning framework can be a valuable device for different applications, for example, traffic checking, observation, or independent vehicles. Such a system can help road safety and productivity by providing accurate and dependable results with careful design and implementation.



Getting latitude & longitude



Getting location



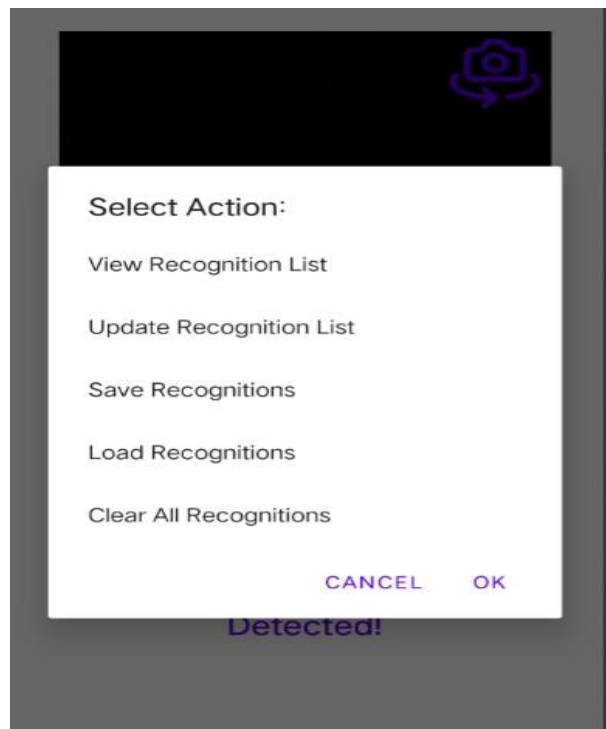
ADD FACE  
Recognized Face:

No Face  
Detected!

7GGR+6C7, Sawarkar Nagar, Vita

OPTIONS

Frame capture



Update and face recognition



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## VI. ACKNOWLEDGMENT

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## VII. CONCLUSION

We have tried implementing the idea of bringing the vision level of the blind very close to the normal ones. The project proposes a smart android app which enhances participation of the visually impaired by enabling them to be more effective in social interactions with the help of advance technology related to face recognition, location service and text to speech using smart phone.

## REFERENCES

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