



A Review Paper On Location And Face Recognition Inform To Blind Person

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Abstract: We created a mobile app to assist blind persons in navigating their surroundings on their own. The app uses the GPS (Global Positioning System), which gathers raw data for location coordinates where blind people are standing. Android then processes these data to calculate real coordinates related to current position, checks the position address or location details from a database or Google API, and then converts this address to voice message, which the blind person then hears through a headset. Our design goals are to create an application that is less expensive by using fewer components and simple to use so that a blind person doesn't need to do anything other than hear the voice message.

Keywords: Location, Face Recognition, Face Detection, Machine Learning.

I. INTRODUCTION

In this project, the blind will be able to recognise people through face recognition and receive an audio message that says, "This is so and so person." The blind will then be able to speak to the person without having to wait for the person on the other side to approach him and initiate communication; all he needs to do is recognise the person. The database can also be expanded to include the new faces. In reality, the goal is to slightly improve blind people's vision compared to normal people. With the aid of faces recognised from the recorded video, even they would be able to identify individuals and their facial expressions on their own.

II. PROPOSED WORK

Finding people is one of the major challenges that visionaries face. As mobile devices' computing capabilities increase, applications that can aid the blind are being created. The suggested facial recognition system has simple features that make using the system easier for persons who are blind and is designed to function with mobile devices. The primary requirements for mobile systems are small device dimensions and light weight. This is accomplished by using a portable and lightweight system that combines headphones, mobile devices, and portable cameras. Delivering software that is suitable for mobile platforms requires straightforward apps and well-known operating systems. The Android operating system makes it possible to create user-friendly applications by employing inherent accessibility features.

III. LITERATURE SURVEY

As they moved from one location to another, authors of the literature employed a variety of strategies to assist visually impaired persons with navigation wherever else they require safety. For these reasons, the mechanisms in place had suggested numerous uses. Filtering, deep learning, and convolutional neural networks are the methods that are most frequently utilised (CNN). The coding and decoding of the facial image using an information theory approach is addressed as a face recognition methodology.

IV. DESIGN METHODOLOGY

Getting Location Of Blind Person

In this module, fetching the coordinates of Blind Person through 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

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.

Capture Frame from camera

In this module we capture real time frame(images) from camera.

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.

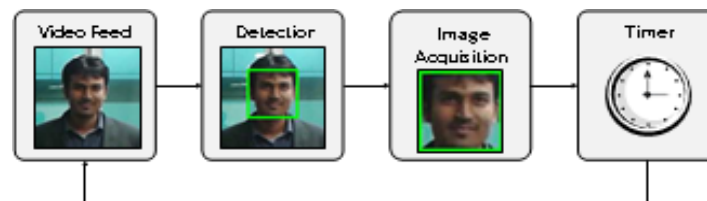
Face recognition

In Face recognition face recognize throw face ML model.

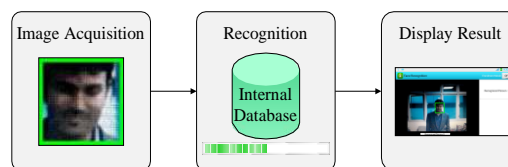
Text to Voice

After getting address From Google location Api, which is in String format. So we have parse it and get it in proper text format. And convert text to voice and inform to blind person.

Also 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.



Detection procedure of the mobile application.



Recognition procedure of the mobile application.

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