

Synopsis

Visual impairment is one of the largest obstacles facing humanity, particularly in the present, when text messages (both electronic and paper-based) are utilised to communicate information more frequently than voice. The device we are building is intended to help those who are impaired. We created a tool that converts text from a picture into speech as part of this research. It takes a picture, focuses on the relevant part of it (the part of the image that contains the text), and then speaks the text. Several image pre-processing techniques are applied to the acquired image in order to isolate the portion of the image that contains the text and remove the background.

Introduction

- Advances made with new technologies have boosted the development of systems to assist the daily lives of the visually impaired people.
- These systems intend to help by providing their user with some critical information about their environment using senses they can still use.
- Blind people face several challenges when interacting with their environments because so much information is encoded visually.
- The proposed method enables the visually impaired people to see with the help of ears.
- The novelty of this paper is to convert the image to sound using the methodology of edge detection.