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An Assistive Reading System for Visually Impaired and Blinds using OCR and TTS Techniques on Lab View

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Abstract: Gaining of knowledge by simply listening to sounds is a peculiar feature. Though text is a medium of communication but speech is more powerful means of communication than text. Optical character recognition has becomeone of the most successful technologies in the field of pattern recognition and artificial intelligence. In order to improve theability to access textual information, a help system was used that reads text from a handwritten and scanned document and converts the textual information into speech. The generated speech signals can be saved and reproduced for later use. Themain objective of this paper is to develop a cost effective and user-friendly optical character recognition-based speechsynthesis. This paper integrates the text and speech synthesizer which is performed using Laboratory virtual instrumentsengineeringworkbench(LabVIEW2017version).

Keywords: Optical Character Recognition, Textto Speech, Image Acquisition, Lab VIEW, etc.

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