**Title of the Project** : Braillo-Phone Integrated Communication Software for Visually Challenged and Hearing Impaired

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**ABSTRACT**

From the olden days, Deaf-Blind people have used tactile sign language and braille to communicate with others. Currently, there are many technologies and devices for braille communication such as tellatouch, telebraille, and screen braille in which a deaf-blind person can read or write. However, since these devices are not portable, they face great difficulties in communicating with those who don't know braille during their travel.

Our proposed system is a device that converts human speech into braille text and vice versa. The device will contain a refreshable braille display and a Braille keypad with a microphone. The speech is given as input to the device through a microphone and speech is converted to braille text then displayed on the braille display which can be read by the blind person through contact. The blind person can communicate using a braille keypad whose input braille will be converted to human speech. Our device will help visually and hearing-impaired people to conveniently communicate, for educational purposes, and with others at convenience stores, shopping malls, and other areas.