E-Learning Assistive System for Deaf and Mute Students

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Abstract

E-learning has become a popular digital platform among both students and teachers. When using an e-learning system, deaf-mute students can get significant benefits. It allows students to better grasp their studies by providing additional details. The major problem that the deaf and mute community encounters in the e-learning environment is that they are no longer attempting to enroll in normal institutions, which do not provide many facilities for them due to a lack of resources, a lack of learning facilities, and some social disturbances. In order to overcome that problem our system translates the lecturer's voice into text, maps words with pre- created sign language animations, generates subtitles for lecture videos and clearly identify the face position of the lecturer. The ability to detect difficult words, track the hand gestures, and practice sign language increase learning resources, facilities, usability and help teachers to execute their teaching process through this platform. Therefore, normal institutions can use this system as their Learning Management System. It will approach deaf and mute students to enroll in normal institutions and do their studies as typical students.

Keywords

Deaf And Mute Students, Learning Management System, Online Learning Tool.