SmartNotes: An Intelligent System that Enhances Efficient Social Communication in Learning Environments

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This project is designed to help people conveniently receive information regardless of any environmental distractions. One major factor contributing to inefficient communication in learning environments is the audience's inability to clearly receive the presented information. This breakdown in communication may be due to large audience sizes, the clarity and volume of the speaker's voice, as well as language barriers. Using a microphone connected to an educator, the SmartNotes system displays the speaker's speech as text in an application which has been downloaded by the audience. This prevents any information from being missed, gives access to the information outside of learning environments, and allows each member of the audience to actively engage in the lesson. The prototype consists of an LED display connected to a micro-controller board which receives voice communication from a microphone via Bluetooth. Additional programmed features allow the speaker to post information on social media, display and control online pages, and translate the transcriptions to multiple languages using only voice commands. SmartNotes can benefit the millions of people around the world who are functionally deaf and dependent on an ASL interpreter or real time captioner for communication. This innovative project could revolutionize education in schools as well as professional businesses and improve communication for everyone.

Awards Won:

Fourth Award of $500