MAKER: WiFi-based Crowd Audio Management System

Dr. Hugh Jack P.E., Western Carolina University

Dr. Jack is not the author. This abstract has been submitted on behalf of Aliakbar Kachwala, Ram Kumar Patel, Deepak Kaushik - ITM Vocational University, Gujarat, India.
WiFi Based Crowd Audio Management System

Authors

Aliakbar Kachwala, Ram Kumar Patel, Deepak Kaushik
ITM Vocational University, Gujarat, India

Abstract

WiFi based Crowd Audio Management System is an android application. In a large gathering, during a question and answer session, a large number of people may want to participate and raise the question and this need to have many volunteers with microphones moving from one place to another. This involves the use of many microphones, volunteers’ rapid movement from one participant to another and delay caused due to the movement.

To eliminate this problem, we have made a mobile application which can stream the audio by utilizing the smartphone's microphone over a Wi-Fi network created in the auditorium. One volunteer is needed at the back end to manage the voice channels that arise from the microphones of the participants. When participants raise a question through their smartphone, the volunteer uses a router switch and a computer to select the participant on the first come first serve basis and feeds the audio to an amplifier and then finally to the speakers in the auditorium. This uses just one volunteer to manage the entire Q&A session in a very effective way.

This can be used in road shows, amphitheatres, etc. where a large number of people take part in the public conversation.