To explain the problem statement briefly, consider a real life scenario, I configured the orientation and volume levels of my sound system in order to get perfect surround sound at some position where I usually seat. But, now I want to change my seating position or even arrangement to some other part of my room which can be far right or left or may be forward or backward from the last seating arrangement. In this case to get perfect surround sound I need to reconfigure my speakers again, that is, its orientation and volume levels as per the new seating position either with the help of technician or self which is mostly manual adjustments.

To overcome this scenario we experimented a combination of stereo vision and hardware technology which responds to real time movements of listener and dynamically adjust the sound pocket. This system uses opencv face detection algorithm and simple geometrical formula to calculate depths and angles for individual speaker to introduce dynamically adjusted surround sound. Since the system avoids the heavy usage of hardware, complex algorithms and machine learning approach it can be implemnted on low powered micorprocessors as well same processors used by sound systems.