ABSTRACT

It is really difficult for people with disability to control mouse. With help of touchless techniques of Human Computer Interaction, the disabled people will be abletoexperiencethedigitalized technologies. Weproposea CNN-based approach forcontrolling mouse cursor using eyeball movement whichisimplemented using Python. The proposed method aims to provide an intuitiveand natural way of computer interaction forindividuals with disabilities ormobility impairments. The system uses aCNN model toaccurately track theuser's eye movements, which are then translated into cursor movements on a computer screen, By studying the concept of packages in problem solving and Python programming, we have implemented speech translation. We have used dlib, OpenCV, gTTS library for implementing ourconcept. Theeffectiveness of the proposed system was evaluated through experiments, whichdemonstrated its potential as a viable alternative to traditional mouse control methods. Along with mouse cursor control we have integrated speech recognition which helps the user to open applications using voice. Overall, the proposed approach can have a significant impact on the lives of individualswith disabilities by providing an accessible and effective means of computer interaction.