

EyeClicker - Capstone Goals

EyeClicker is solution that allows users to control a computer, hands free. EyeClicker will allow users to control the cursor on their screen with their eye movements and input mouse clicks through voice commands. EyeClicker can be used by anyone wanting or needing a hands-free computer experience (eg. because of medical needs) or people that want to improve their multitasking efficiency.

Goals

1. EyeClicker will be able to track where on the screen your eyes are looking and display it on screen. We will utilize a camera and the computer to calculate where the user is looking.
2. EyeClicker will allow users to move the cursor to the spot on the screen that they are looking at.
3. Allow the user to input keyboard inputs and mouse clicks using their voice. Users will also be able to use their voice to use commands such as dragging and copy and pasting.
4. Allow the user to left click by blinking.
5. Allow user to calibrate settings to improve accuracy of cursor position vs eye location. The improved accuracy will result in a more pleasurable user experience with less mis-clicks.
6. EyeClicker will control the cursor with low latency. This will result in a more real time experience with less lag.
7. EyeClicker shall allow the user to use their own hardware components (microphone and webcam).