Virtual Desktop Assistant

Mrs. U. Hema Ramalakshmi, Mandi Obul Reddy, Kommi Madhan, Boggavarapu Phanindra
Professor, Department of Computer Science and Engineering
Prathyusha Engineering College, Chennai, India

Abstract: The project introduces an application using computer vision for Hand gesture recognition. A camera records a live video stream, from which a snapshot is taken with the help of interface. The system is trained for each type of count hand gestures (one, two, three, four, and five) at least once. After that a test gesture is given to it and the system tries to recognize it. Nowadays many things are automated and developed using gesture recognition. But the thing that we are using from many years was still being using in the traditional manner. That is the Operating system interactions we are using. So why don't we automate and made the interactions possible using hand gestures . In this project we develop a python based desktop program to do the simple tasks like opening files or apps and many other tasks like taking screenshot , pausing video, increase and decrease volume , using a virtual mouse etc using just our hand signs and finger movements. It will increase the user engagement with the os and makes tasks easier to the users.

Keywords: OS, HAND GESTURE, VIRTUAL MOUSE, RECOGNITION, GRADIENT METHOD,

REFERENCES

[1] Adrian MOISE, Gabriela BUCUR, Crîstina POPESC 'Automatic System for Text to Braille Conversion';Electronics, Computers and Artificial Intelligence, Vol. 9, no. 01, pp. 563-587 July 2017

[2] Muhammad Salman Haleem 'Voice Controlled Automation System';Department of Electronic Engineering NED University ofEngineering and Technology Vol. 3, no. 01,pp. 234-256 July 2015

[3] Rajendrasing Rajput,Rushikesh Borse 'Alternative Product Label Reading And Speech Conversion: An Aid For Blind Person';Institute of Electrical and Electronics Engineers,Vol. 2, pp. 87-95 Feb 2019

[4] Sharavana K , E Sivasubramanian , Arpitha N , Monish M Gowda , Gajanan Manjunath Naik , Vijayalakshmi 'Real-Time Text to Braille and Audio Convertor';International Research Journal of Engineering and Technology (IRJET) ,Vol. 7 no. 8 ,pp. 439-678 Aug 2020

[5] Nandini,GRIE UNIVERSITY,IEEE Research paper,Voice and Gesture based Virtual Desktop Assistant for Physically Challenged People.