Gesture Controlled Prosthetic – Hand

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Abstract: *This project describes about design and fabrication of a gesture controlled robotic hand using computer vision, instead of button and joystick. The aim of the project is to create a gesture-control for hand to perform pick and place tasks. Gesture recognition consists of three stages: capturing of image, image processing and data extraction. The hand consists of servo motor, web camera ,arduino nano and braid wire ,which is used to control the finger's motion, capturing data ,commanding servo motor and to transfer the motion from servo motor to fingers. .This hand is constructed to reduce human difficulties and used for physically challenged people because of simple, flexible and easy control. In future it can be used to eliminate bombs, military purposes and hazardous operations. The hand operate in the way of opening and closing, up and down motion .From further research it can be used for the whole humanoid robot that will benefit in various areas applications and so on.*

Keywords: Gesture Recognition, Robotic Hand, Human Computer Interaction

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[13]. SERSC A Study on New Arduino NANO Board for WSN and IoT Applications Hani Al-Mimi1* , Ali Al-Dahoud1 , Mohamed FEZARI, Mohammad Sh. Daoud