ABSTRACT

In the development of the world of technology today, there are many positive impacts on the science of human-computer interaction, and the use of computer vision input, especially in the security industry and in the automation industry. Currently in the security industry the use of cameras is only used for taking pictures of the surrounding area and computer vision is used to detect if there are objects or people moving around the monitoring area, while in the automation industry the use of sensors used to run servo motors requires maintenance and training on its use, if the tool has many and complex sensors, it takes more time to provide training in the use of the tool, it is necessary to design a Hand Gesture Control that can make it easier for users to control the servo using image processing, which is more user friendly and does not require the use of sensors. The purpose of computer vision (Computer Vision) is to produce a system that is useful, efficient, effective and functional in the field of image processing. This article explains that there is a need for technological developments and innovations, especially regarding Motor Control using Hand Gestures using hand movements. The results of this project are made a tool that is able to control the servo motor which can rotate its direction according to the value taken from the movement of the fingers, for example its application can be used in the field of industrial automation that uses several combinations of servo motors that will form a robotic arm and controlled chamber. so that it can be easier to control and monitor.

Keywords: Computer Vision, Hand Gesture Control, Image Processing, Servo Motor, Image Capture.