

AirTouch

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A key part of augmented reality is an area of research called computer vision. Computer vision is an area of research that deals with the way computers respond to camera input. Webcams have become a very popular tool within the past decade. Many laptop computers now have integrated webcams, which provide for live camera input to the computer. Using these devices, it is possible to communicate with computers in ways apart from the traditional mouse and keyboard. In this paper, I have developed a program called "AirTouch" which enables users to control a computer only by using hand gestures and voice input. Through the process of developing this program, I have discovered the best methods and algorithms to use for skin detection in YCrCb, tracking with mean-shift, defect detection, and finite state machines (FSM).