ABSTRACT

Image processing to be very important in the development of technology, image processing was applied to many cases in people's lives that can help facilitate the work of man. This study implements image processing to detect victims of natural disasters that will make it easier in the process evacuation the victims of natural disasters using drone, this detection process using the branch of computer science, namely in the field of Computer Vision sub object detection.

The object is the overall pattern detection in the human body with bright lighting that has a difference in color with surrounding objects, in practice the author uses the method of Histogram of Oriented Gradient (HOG) as a method to be used to detect the object and the method of Support Vector Machine (SVM) as a HOG feature can match the right object with human patterns that have been stored on the SVM, the outcome of the detection and location will be sent to the server using the network Delay Tolerant landscaping Network (DTN). In addition to the results of a detection system can also send theGPS data to a server that is assumed to be the location of the whereabouts of the victims are. The parameters to be tested i.e. accuracy in detecting, speed and distancedetection in detecting objects that can be reached by the system.

Keywords: Image Processing, Computer Vision, Object Detection, Histogram of Oriented Gradient, Support Vector Machine, Delay Tolerant Network, GPS.