

Abstract

Finding victims is the main purpose of disaster recovery. Victims with minor and major injury must be rescued quickly, so that they do not become in a bad condition. Such that with a dead body needs to be identified quickly. If injured victims or dead bodies are located in an outlying area and hard to be searched by a rescue team so that it is hard to be evacuated. For that purpose, a system that can handle that problem, a system that can identify victims and can go across a difficult area.

So that, this research work through one of the solutions that can be purposed to handle that case study. The solution that is wanted in this research is to build an application that can identify human victims with a discriminatively trained part-based models method. The discriminatively trained part-based models method is an object detection method developed from a histogram of oriented gradient (HOG) feature, with a part-based pictorial structure feature, and with a latent SVM learning method.

This system will be used with precision and recall for measuring the testing process with a final calculation parameter is average precision. From the experiment parameters, the optimum configuration system, from that output result of this system is 0,3892 measured by average precision.

Keywords: discriminatively trained part-based models, victims detection, latent SVM, histogram of oriented gradient, average precision, pictorial structures.