Abstract

Victim evacuation after a disaster occurred is certainly necessary. However, the process of evacuation needs time, resource, and cost a lot. The rescue team often have difficulty while evacuating the victims. The difficult terrain and hard to find the victims usually become the main constrains.

Therefore, we need an additional capability which can detect the existence of victim object from an image. As a first step, this research builds a system which can detect human while laying down on the ground/floor as if a victim.

Histogram of Oriented Gradient method is used in this project. The processing result by HOG will be processed by linear Support Vector Machine (SVM) as learning method to distinguish the human victim and non-victim. The performance of the system measured by the value of accuracy, while the precision of the bounding boxes measured by the value of the precision.

Keywords : People Detection, Victim Object, Histogram of Oriented Gradient (HOG), Support Vector Machine (SVM).