

Abstract

Indonesia is a country that is very vulnerable to disasters in the world. Lots of natural disasters that have occurred in Indonesia such as earthquake, landslide, tsunami, and other. If there is a disaster, immediate rescue is needed, but search and rescue teams often have difficulty in evacuating due to limited equipment and extensive disaster area. From this problem, a robot is needed to simplify the process of evacuating disaster victims in terms of providing information on the position of the victims. Caterpillar softrobotic is a robot that has surveillance capabilities to detect disaster victims using face detection. From the test results, the percentage of victims that could be detected was 88,89% and has a maximum control distance of 32 meters.