ABSTRACT

Tropical countries have a warm and humid climate are suitable habitat for the lives of reptile animals, especially snakes. Snakes are a type of reptile animal that is widely found in tropical countries, especially in Indonesia. The worst thing that happens when meeting a snake is the bite of snake. If the bite comes from a venomous snake it can cause a more serious problem than the bite from non-venomous snake is, which can cause paralysis, disability, and the worst is death. According to the WHO (World Health Organization) an estimated 5.4 million people are bitten by snakes each year with almost 2.7 million being bitten by venomous snakes and get affected symptoms. Around 81,000 to 138,000 people die every year. This research uses image processing technic to make the identification system of snake bites whether venomous or non-venomous. The method used in this system is Active Contour Model and Support Vector Machine. By using these methods, the highest accuracy is obtained in the best of SVM kernel, on RBF kernel and Polynomial kernel.

Kata Kunci: Snake, Bite, Image Processing, Active Contour Model, Support Vector Machine