**Abstract**
**The World Health Organization (WHO) estimates that more than 5 million people worldwide are bitten by snakes every year, with a death rate reaching more than 100,000 people. Snake populations like other reptiles will reproduce optimally in tropical and humid climates such as in Indonesia, the increase in snake populations is directly proportional to the increase in snake bite cases. Data in Indonesia is estimated to have occurred 12,739 - 214,883 cases of snake bites with a death rate of 20 - 11,581 people, so that Indonesia is one of the tropical countries with a high risk of being bitten by both venomous and non-venomous snakes. Identifying the cause of snake bite marks is very important in helping the victim, because after the bite there is an anatomical difference between the bite marks of a venomous snake and a non-venomous one. This study tries to build a venomous and non-venomous snake bite mark identification system using image processing based technology using the *Local Binary Pattern* and *AdaBoost* methods, from the research results obtained the optimal value of accuracy of 100% from the training data and 94% from the test data with a *pixel* resolution of 400x400.**

**Keywords: Snake bite, Local Binary Pattern, AdaBoost**