

## **ABSTRACT**

Pattern recognition system in this time is having a lot of improvement and being useful for human. One of the most known of this system is handwriting recognition. Indonesia with a lot of culture has many kind of region character. Balinese character is one of them, balinese character very unique because each character has a lot of similarity and can be deferent only by one line.

With this problem a balinese character recognition system has been developed to recognize a balinese character with MDF method, analyze the accuration of the system and to anylize the element that can be change the accuration level.

Modified Direction Feature Technic is a technic that take the feature extraction from all direction to make a specific feature. From the feature vector that takes from the image, it can show the uniqueness of balinese character.

This Balinese character recognition system using MDF and neural network has a conclucion that this system can use for feature extraction balinese character, where the distance of each feature vector is enough to make the different between the pattern, the accuration system is influenced by normalization, trantition and the region deviding.