ABSTRACT

The Sundanese script is a cultural heritage of the Sundanese people from the land of Sunda, West Java. The Sundanese people used Sundanese handwriting when they first recognized writing. Images are visual information, but not all images are good quality. Sometimes there is noise that can damage the information in it. Therefore, this research improves image quality on Sundanese handwritten image data using the Arithmetic Mean Filter and Gaussian Filter methods to be classified using the Support Vector Machine method. The Arithmetic Mean Filter and Gaussian Filter methods effectively improve image quality. We can also see this from data classification results before and after improving image quality. Noise data on Gaussian noise, salt and pepper noise, and spackle noise before being improved gets an accuracy value of 19%, 54%, and 52%. After being improved using Gaussian Filter method, the accuracy value increases by 52%, 56%, and 70%. Meanwhile, using the Arithmetic Mean Filter method, the accuracy value increases by 59%, 65%, and 74%. Based on the overall test, we can conclude that the Arithmetic Mean Filter method outperforms and yields better results than the Gaussian Filter method in enhancing image quality for the classification of Sundanese script handwriting.

Keywords: Sundanese script, image, classification, Arithmetic Mean Filter, Gaussian Filter