

ABSTRAK

Aksara Jawa merupakan salah satu ragam budaya Indonesia yang saat ini masih dikenal oleh banyak orang. Dibeberapa daerah , aksara Jawa masih digunakan pada fasilitas umum, seperti papan nama jalan di sudut-sudut Kota Yogyakarta. Namun, meski aksara Jawa dikenal oleh banyak orang, masih ada beberapa orang yang tidak mengetahui arti atau cara membaca aksara Jawa. Peran teknologi sangat dibutuhkan dalam pengenalan Aksara Jawa, yaitu dengan menggunakan klasifikasi *Modified K-Nearest Neighbor* dalam klasifikasi aksara Jawa.

Metode ini merupakan perkembangan dari metode *K-Nearest Neighbor*, dimana terdapat dua tambahan proses yaitu menghitung nilai Validitas dan menghitung *Wiegth Voting*. Evaluasi pada metode *Modified K-Nearest Neighbor* menggunakan metode *Cross Validation*. Selain itu juga menggunakan variasi nilai K pada *Modified K-Nearest Neighbor*, variasi ukuran Ekstraksi Ciri IoC, dan variasi pada nilai *K-Fold* dalam *Cross Validation*. Dari penelitian ini didapatkan akurasi terbaik sebesar 75,37% dengan menggunakan nilai *K-Fold* 7.

Kata Kunci : Modified K-Nearest Neighbor, Klasifikasi, Aksara Jawa, Cross Validation, Intensity of Character.

ABSTRACT

Javanese script is one of the various Indonesian cultures that is still known by many people. In some areas, Javanese script is still used in public facilities, such as street signboards in the corners of the city of Yogyakarta. However, although Javanese script is known by many people, there are still some people who do not know the meaning or how to read Javanese script. The role of technology is needed in the introduction of Javanese script, namely by using the Modified K-Nearest Neighbor classification in the classification of Javanese characters.

This method is a development of the K-Nearest Neighbor method, where there are two additional processes, namely calculating the Validity value and calculating the Weight Voting. Evaluation of the Modified K-Nearest Neighbor method using the Cross Validation method. In addition, it also uses variations in the value of K in the Modified K-Nearest Neighbor, variations in the size of IoC Feature Extraction, and variations in the value of K-Fold in Cross Validation. From this study, the best accuracy was obtained at 75.37% by using the K-Fold 7 value.

Keywords: Modified K-Nearest Neighbor, Classification, Javanese Script, Cross Validation, Intensity of Character.