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[JTI] CLASSIFICATION OF GEOMETRIC BATIK MOTIF TYPICAL OF INDONESIAN USING CONVOLUTIONAL NEURAL NETWORK

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#24968 Summary

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TITLE AND ABSTRACT

Title	Classification of Geometric Batik Motif Typical of Indonesian Using Convolutional Neural Network
Abstract	Batik is a world heritage from Indonesia which is a characteristic of Indonesian culture. On October 2, 2009 batik has been awarded as a cultural heritage from UNESCO. Indonesia has 5.849 batik patterns from Aceh to Papua. The ability to recognize batik cloth patterns is certainly quite difficult and only owned by certain people who have expertise. One way to identify batik patterns is by using a pattern recognition classification method based on quantitative measurements of the main features or characteristics of an object. Deep Learning is one solution to detect batik patterns automatically. One of deep learning methods that can classify patterns of batik patterns is Convolutional Neural Network (CNN). CNN is able to group and detect objects in the image automatically by accepting input data with a size of $m \times n$. CNN uses image input through a convolution layer and be processed according to the specified filter. Each layer produces a pattern from several parts of the image that facilitates the classification process. This study uses the CNN method and obtains the average value of 96% accuracy, 96,78% precision, 96,74% recall, and 96,74%.

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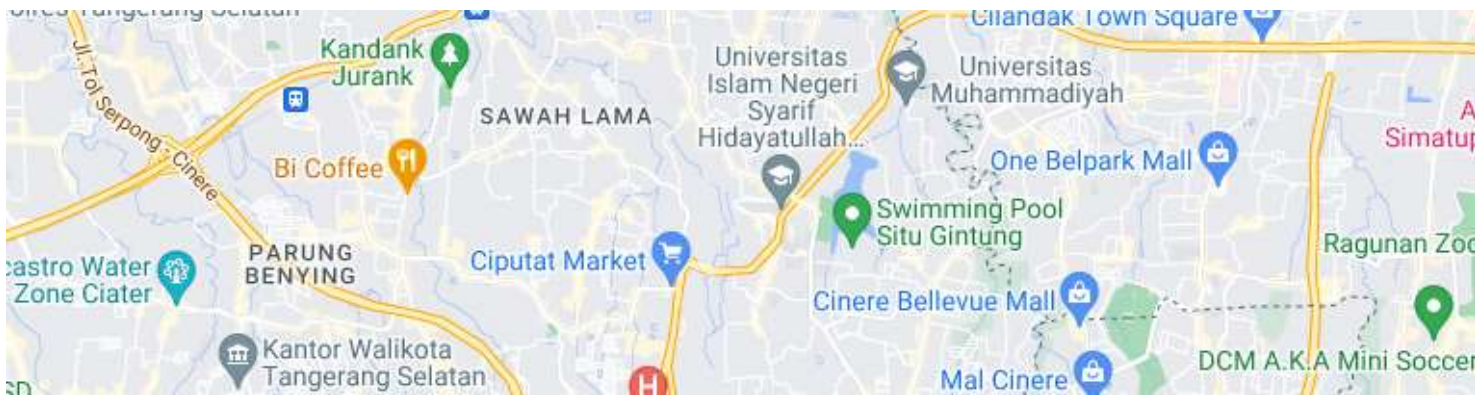
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