ABSTRACT

Indonesia, as a country with diverse ethnicities and cultures, has various scripts as its heritage. Although various other studies have been conducted to preserve scripts, the research has been limited to character-level classification. The urgency to develop a model that can perform classification at both the script and character levels is increasing. This research proposes an architecture that can perform classification at both levels, called BJS-CNN. This model works by generating two losses on each forward pass for each character label and character label. The model from this architecture can achieve an accuracy of 99% on all labels during the training phase while during validation phase, the model achieves 99% on the script label and 97% on character label. This model successfully outperformed another model in a different study while simultaneously being able to classify at two levels, something that other models do not possess.

Keywords: BJS-CNN, script, script-level, character-level