Learning Media for Recognition of Wayang Kulit Characters Using
Convolutional Neural Network Method

Bety Etikasari, S.Pd, M.Pd

Danu Wicaksono

Informatics Engineering Study Program
Department of Information Technology

ABSTRACT

This study aims to develop a learning media for recognizing wayang kulit characters using the Convolutional Neural Network (CNN) method with MobileNetV2 architecture on mobile platforms in real-time. The background of this research is motivated by the importance of preserving wayang kulit culture, which is increasingly losing popularity, especially among younger generations and students. Despite its high philosophical and moral values and being recognized as a world cultural heritage by UNESCO, interest in this art form has declined due to technological advancements and foreign cultures. This research offers a solution by leveraging technology to make wayang kulit learning more engaging and interactive. The results of the study show that the developed media achieved the highest accuracy rate of 82% on test data, 75% during validation, and 74% in direct testing.

Keywords: wayang kulit, Convolutional Neural Network (CNN), MobileNet, interactive learning, cultural preservation, mobile application.