

RESEARCH-ARTICLE

# Early Identification of Cancer Blood Disorder Using Deep Convolutional Neural Networks

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## Abstract

A cancer blood disorder can be dangerous if not detected in time. It causes aberrant white blood cell production in the blood by the bone marrow. Using image processing of microscopic images of the blood, it may be quickly diagnosed. Deep learning techniques are a practical approach to cancer blood disorders in early diagnosis. In this study, we have proposed a novel method to identify cancer blood disorders in the early stage using the deep convolutional neural network (DCNN). Using filtering techniques, the microscopic images are first preprocessed. The 2D Adaptive



attained the maximum accuracy of 97%. According to the results, the proposed method can identify blood cancer with high accuracy and may help with its diagnosis and treatment in the early stages.

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