

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 4, Issue 4, June 2024

Result Analysis of Medical Diagnosis through Machine Learning

Sudhir Kumar Thakur¹ and Dr. Savya Sachi²

Research Scholar, Department of Computer Science and Engineering¹ Assistant Professor, Department of Computer Science and Engineering² Rajiv Gandhi Proudyogiki Mahavidyalaya, Bhopal, M.P, India

Abstract: The benefits and drawbacks of each approach in different medical domains were shown by comparing and contrasting the different deep learning models. Convolutional Neural Networks (CNNs) have shown exceptional performance in the field of medical image processing, especially in the identification of lung cancer from chest X-rays. It has been demonstrated that Recurrent Neural Networks (RNNs) are effective at processing sequential medical data, including electrocardiogram (ECG) signals, in order to anticipate arrhythmias. The application of generative adversarial networks, or GANs, has improved the consistency and quality of histopathology images, leading to a more precise identification of pathological disorders. An important advancement in personalized medicine has been the demonstration by autoencoders of their ability to identify genetic alterations from genomic data. The case studies presented in this paper offered specific instances of how deep learning models have been applied successfully in various medical fields. These models have the potential to enhance diagnosis accuracy, efficiency, and patient outcomes, according to the performance study and its findings.

Keywords: Recurrent Neural Networks, Convolutional Neural Networks, Machine Learning, Deep Learning, Disease Diagnosis, Computer-Aided Detection, Cancer, Tumours

