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SNN Based Neuromorphic Computing Towards Healthcare Applications

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[Prasenjit Maji](#) , [Ramapati Patra](#), [Kunal Dhibar](#) & [Hemanta Kumar Mondal](#)



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Abstract

The diagnosis, treatment, and prevention of diseases may be revolutionized by integrating neuromorphic computing, artificial intelligence (AI), and machine learning (ML) into medical services. A novel method of processing complex data that more effectively and quickly mimics how the human brain works is called neuromorphic computing. This paper provides an overview of neuromorphic computing and its uses in AI and ML-based healthcare. We talk about the advantages and disadvantages of using these technologies as well as how it helps to accelerate the entire diagnostic procedure. We also provide case studies of how neuromorphic applications have been successfully used in the medical field to diagnose and predict diseases. Additionally, we provide the medical and healthcare industries with enhanced Spiking Neural network application results with up to 98.5% accuracy.

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