

# Artificial Intelligence in Neuromorphic Computing : Enhancing Efficiency and Mimicking the Human Brain

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**Abstract:** *In recent years, neuromorphic computing has emerged as a revolutionary project in artificial intelligence (AI), taking inspiration from the human brain to achieve more efficient computational strategies. This paper explores the integration of AI into neuromorphic computing, search developments, challenges and potential applications. Our study shows that neuromorphic systems offer significant gains in power efficiency and parallel data processing, which are crucial for AI applications, especially edge computing. This study provides insight into the potential of neuromorphic computing to transform AI by providing ecologically derived solutions to current computing limitations.*

**Keywords:** neuromorphic computing, artificial intelligence, computational, data processing