



EDITORIAL

Journal of Applied and Fundamental Sciences is an international peer-reviewed open access journal, published by Assam Don Bosco university since 2015. It is an interdisciplinary journal and publishes original, significant, and current scientific research findings, quality review articles, technical reports, patent alerts, and case studies on the latest innovative findings of new methodologies and techniques covering subjects that fall under the wide spectrum of Biosciences, Botany, Zoology, Chemistry, Mathematics, and Physics.

Research is an absolutely necessary component of higher education in an advanced institute and university. According to Clifford Woody, research comprises defining and redefining problems, formulating hypothesis or suggested solutions: collecting, organizing and evaluating data, making deductions and reaching conclusions; and at last carefully testing the conclusions to determine whether they fit the formulating hypothesis. Research is, in fact, an original contribution to the existing stock of knowledge making for its advancement. In the 21st Century, Artificial intelligence (AI) and its sub branches: Machine Learning and Deep Learning are playing very crucial role in every field of Science and Technology.

Artificial intelligence is the simulation of human intelligence processes by machines, especially computer systems. Specific applications of AI include expert systems, natural language processing, speech recognition and machine vision. AI is simply a component of modern technology, such as machine learning. AI requires a foundation of specialized hardware and software for writing and training machine learning algorithms. No single programming language is synonymous with AI, but Python, R, Java, C++ and Julia have features popular with AI developers. On the other hand, Machine learning enables software applications to become more accurate at predicting outcomes without being explicitly programmed to do so. Machine learning algorithms use historical data as input to predict new output values. This approach became vastly more effective with the rise of large data sets to train on. Deep Learning, a subset of Machine Learning is based on our understanding of how the brain is structured and its use of artificial neural networks structure is the underpinning of recent advances in AI, including self-driving cars and ChatGPT.

Artificial intelligence is also heavily used in medical technology, photonics technology, green technology, smart industrial electronics, smart manufacturing solutions, IOT bases solutions, etc. Robotics is broadly used in engineering solutions, spectroscopy based solutions, sensor technology, smart villages, smart agriculture and low cost solution to improve the quality of life.

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Prof. Tarini Kumar Dutta
Chief Editor