

Early Prediction of Diseases in a Cow for Cattle Industry

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Abstract : In this paper, a machine learning-based approach for early prediction of diseases in cows is proposed. Different ML algos are applied to extract useful patterns from the available dataset. Technology has changed today's world in every aspect of life. Similarly, advanced technologies have been developed in livestock and dairy farming to monitor dairy cows in various aspects. Dairy cattle monitoring is crucial as it plays a significant role in milk production around the globe. Moreover, it has become necessary for farmers to adopt the latest early prediction technologies as the food demand is increasing with population growth. This highlight the importance of state-of-the-art technologies in analyzing how important technology is in analyzing dairy cows' activities. It is not easy to predict the activities of a large number of cows on the farm, so, the system has made it very convenient for the farmers., as it provides all the solutions under one roof. The cattle industry's productivity is boosted as the early diagnosis of any disease on a cattle farm is detected and hence it is treated early. It is done on behalf of the machine learning output received. The learning models are already set which interpret the data collected in a centralized system. Basically, we will run different algorithms on behalf of the data set received to analyze milk quality, and track cows' health, location, and safety. This deep learning algorithm draws patterns from the data, which makes it easier for farmers to study any animal's behavioral changes. With the emergence of machine learning algorithms and the Internet of Things, accurate tracking of animals is possible as the rate of error is minimized. As a result, milk productivity is increased. IoT with ML capability has given a new phase to the cattle farming industry by increasing the yield in the most cost-effective and time-saving manner.

Keywords : IoT, machine learning, health care, dairy cows

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