INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA

Impact Factor: 8.165

Cattle Disease Auxiliary Diagnosis and Treatment System Based on K Random Forest Algorithm

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Abstract: Animal's is one of the livestock who have high economic potential, whether for livestock, cattle seed, or even for food stock. Everything that comes from animal is a treasure for example the Milk, the Meat, and Cattle-hide. The factor that cause animals to die is the spread of disease that could crock up the animal's health. So that the Expert system is needed to utilize and analye the Animal's disease so it could detect the disease without going to the veterinarian. Random Forest algo is one of the correct method in this expert system wherein began with Symptoms to determine the illness.

KEYWORDS: disease, random forest algo,illness, economic potential

I. INTRODUCTION

India has high potential livestock for example dairy cattle and beef cattle, Livestock breeding products are growing and concentrated in the development area of the production center. With large amounts of production, the need for animal protein in india is increasing with increasing public awareness of the importance of nutritional intake. Therefore, the health of livestock raised by farmers is essential to meet the nutritional needs and in addition to income for the livestock owners themselves. Of the various types of livestock that many reared by rural breeders are Cattles.

Animal disease detection is a useful software for designing an expert system application program, which is able to provide an accurate diagnosis of the likelihood of cattle suffering from disease and how to treat it. By Using website users can directly send the data to the server so that users can see the appropriate criteria of Cattles disease.

II. LITERATURE SURVEY

In[1], the authors focused on medical informatics early detection of a illness is a critical mission. Data mining is a significant contributor to this discipline. Data Mining Technology Usage of Disease Forecasting Program is a recognised phenomenon and is evolving successfully in this area.

In [2] , This paper proposes a scalable system for heart disease monitoring using on Spark and Cassandra frameworks. This system focuses on applying real-time classification model on disease attributes for continuous monitoring of the health

In [3],the authors focused on Data mining is one of the most common fields of study of health-care organizations. Data mining plays an important role in uncovering emerging developments in healthcare company that are valuable to all the parties interested in this sector. Such medical conditions define the unusual state of health that has a significant impact.

In [4] , the different classification algorithms namely Logistic Regression, Support Vector Machine and Nearest Neighbour have been used for liver disease prediction.

III. PROBLEM DEFINATION

Prediction using conventional model of disease risk requires typically a machine learning and supervised learning method that uses training data with the labels to train the models. High-risk and low-risk assessment of animal system is performed in research sets of categories.

IV. PROPOSED SYSTEM

Random tree models are widely used to analyze data in data mining and trigger the tree and its laws and can be used to create predictions. The forecast may be to anticipate categorical values (classification trees) where instances of groups or classes are to be put. Random forest is a classifier in a tree system where each node is either a leaf node, showing the importance of the goal attribute or class of instances, or a decision node, defining a single attributevalue comparison for one branch and subtree for each potential comparison outcome.A Random forest may be used to identify a case by beginning at the tree's root and going across it before a leaf node is reached and offers the instance classification.
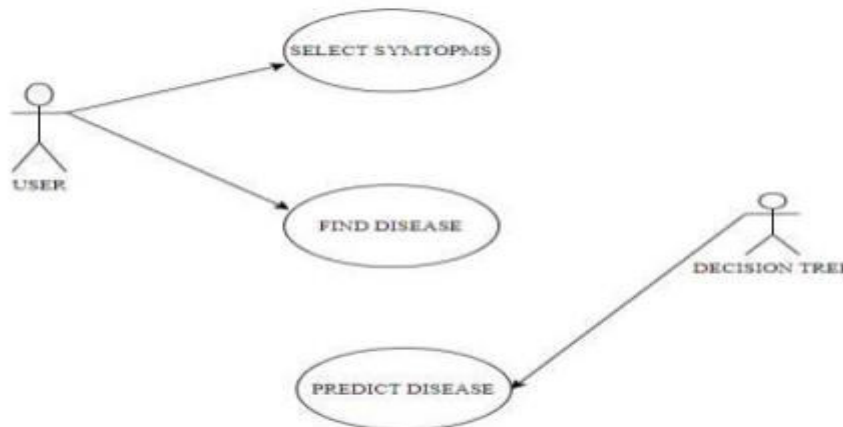

Fig 1.Propose System

6. RULE:
a. Rule 1
      IF High Fever
      AND Weak Body
      AND Weight Loss
      AND Have an abortion **THEN** Brucellosis
b. Rule 2
      IF Have an abortion
      AND Nerve Disorder
      AND Reproduction Disorder
      AND Diarrhea
      AND Death
      THEN Infection Bovine Rinotracheitis
c. Rule 3
IF Weight Loss
AND Diarrhea
AND Milk Production Decreased
AND Trembling body
AND Death THEN Johnes's Disease

V. CONCLUSIONS

With better and larger datasets, more symptoms can be looked for up possible diseases. This kind of system can help in predicting diseases that often go unnoticed earlier and play a crucial role in healthcare.

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