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### Patent Search

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**Abstract:**

Cancer is considered as one of the dangerous disease in the world. Researchers focus on finding best methods for detection of this deadly disease which is of various occurring at different location of the body. Detection of cancer indicates the process of finding formation of cancerous cells in various tissues. This invention focuses development of a accurate prediction model for detecting breast cancer. In this work, recurrent fuzzy neural network trained based on Genetic Algorithm (GA) and neuro adaptive inference system is used together on a machine learning based repository. This dataset is categorized into two sets namely training data set and test data set of the system is done based on recurrent fuzzy neural network trained by Genetic Algorithm (GA). This system is evaluated based on the following parameters namely specificity, sensitivity, precision, accuracy and probability of misclassification error. A highest accuracy of 87.8% is achieved from this proposed system.

**Complete Specification**

- Claims:1. This invention proposes a novel approach for detecting breast cancer by integrating machine learning technology with neural fuzzy logic.
- In this work, recurrent fuzzy neural network trained based on Genetic Algorithm (GA) and neuro fuzzy adaptive inference system is used together on a machine learning based repository.
  - The proposed system comprises of six modules with each of the module involves several phases hence it is a system with multi layers.
  - FBCD module detects the breast cancer by labeling the file log termed as fuzzy labeling which is able to analyze the breast cancer from the dataset.
  - Importing of input variables to the fuzzification phase indicates transformation of input variables into fuzzy linguistic variables such as low, medium or high in by the number range between the values 1 to 10.
  - Designing of the system is done based on recurrent fuzzy neural network trained by Genetic Algorithm (GA) with highest accuracy of 87.8% is achieved from the proposed system.

Description:• Fuzzy interface engine and rule base indicates the third phase where the fuzzy rules are stored in the database and a new reality is obtained by the knowledge of rules utilized in the fuzzy interference engine.

- Fourth phase is defuzzification converting numerals to fuzzy variables.
- Third module is Classification of Breast Cancer Detector (CBCD) which classifies the type of breast cancer from the dataset by utilizing neural network model trained as Extreme Learning Machine for detecting benign or malignant cancer mass along with SVM algorithm.
- Dataset is classified into training data, testing data and validation data in this stage where local minimum of cost function is determined by computing mean of

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(57) Abstract :  
ABSTRACT BIGDATA FOR SECURE EMAIL SPAM FILTERING Spam has developed the basis of verdict exploited by digital crooks to extent malign payloads such as Trojan infections. Combined spam location technique can able to achieve vast choice of email data backed by diversified agents and particularly with remarkable dispute of needing confession content of email. Distance-saving messes are the primary activities exploited for shielding the email security while vesting message description for detecting spam. In this regard, Spamdooop is a vital Big data security protection mutual spam identification tool adapted on chief of a regular map reducing facility. Spam has developed the basis of result exploited by using digital crooks to extent malign payloads like Trojans. Spam discovery strategies related to the community can accomplish vast choice of email data donated by diverse bases and they have the prominent concern of demanding email contact and the spam directs are blocked and notable issues also the mass emails are eminent and stalled right away.

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