Abstract

Breast cancer is the most frequently diagnosed cancer in USA; furthermore breast cancer is the second most frequent cause of death for women in the United States as well as in Asia. In USA 40,600 deaths from breast cancer in 2009, 400 were men. [1] Several well established tools are currently used to screen for breast cancer including clinical breast exams, mammograms, and ultrasound. Supervised training is a technique in which a set of representative input output pairs is presented to the network. Through an iterative algorithm, the interval network weights are adjusted to decrease the difference between the network prediction and the true result for the training cases. The test has been performed on the breast cancer dataset using three classification techniques: Bayes learner, Decision Tree and Neural Net. The experiment concludes that Neural Net performance is better than the Decision Tree classification and Naïve Bayes classification for early detection of breast cancer with better accuracy and precision.
An Application of Classification Techniques on Breast Cancer Prognosis

- An article in TIMES OF INDIA: detecting breast cancer in the young is difficult and that’s bad news for India’s under-35 patient.
- Kopans DB. Sonography should not be used for breast cancer screening until its efficacy has been proven scientifically. AJR Am J Roentgenol. 2004;182:489–491. [PubMed]
- Online Article: Computerized detection of breast cancer with artificial intelligence and thermograms.
- Online Article: The International Congress for global Science and Technology.

Index Terms

Computer Science
Artificial Intelligence
# Keywords

- Breast cancer
- Mammography
- Supervised Learning
- Neural Network
- Naïve Bayes
- Decision Tree