

A New Research on the Machine Learning Technique to Know the Outcome of the divorce court cases

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ABSTRACT

Law and the machine learning are the two factors which are gaining the attention of everyone. This is happening because of the growth of the machine to learn and to understand the data. There are lots of legal data presented and produced every day. This data is very useful for the public. The research paper has the priority on the domain of the law and the divorce cases occurring in some religion like Hindu, Muslim, Christians. The data about the case of marriage and divorce domain of law is given by this research. The laws for the user's religion play a very important role, in which the user can find the probability of losing or winning the case.

Key Words: naive Bayes, divorce law, machine learning.

I. Introduction

Automatic summarization of justice decision was presented in this paper. They used legal text summarizer prototype, which describe the judgment in four types, such as: introduction, context, analysis and conclusion [1]. When a new technology arise in any sector that sector faces a new difficulties that how that technology going to affect the professional sector. This problem is being solved in this paper by providing the information about the problem [2]. Providing good quality of services and end-user perceptions of performance are sometime not possible to attain because in practice these measures are often expensive or impossible to obtain [3]. The problem of the junk-email was solved in this paper by examining the method for the automated construction of the filters to eliminate such unwanted messages from the user mail system. This measure is very helpful in the development [4].

Law was made to maintain a relationship between each aspect of the society or we can say to regulate the rate of the crime, economies, social relationships, business agreements and politics [5]. Law is important for the people to provide a norm guideline for their behavior and sustain normal justice in society. So the information can be collected by the user for the case [6]. Face book is a social

media platform in which people used to exchange information or share the content. Social media users have a special way to express themselves or they have created a new language known as 'internet slangs'. In this paper by the use of the machine learning algorithm we can classify them in a lower level to higher level of the classes [7].

In this research a report on the project with automatic summarization technique was discussed. A method based on the teufel and moens (2002), where sentences are classified according to their argumentative role [8]. The NBA and the classifiers are used in many parts of the world; the basic reason is it offers a robust performance across a large spectrum of problem domains. In this paper a set of the local errors are combine to give a global errors associated to the full attribute set [8].

In this research paper the diagnostics can be used to select which features to combine and use them in a simple generalization of the NBA, applying the resulting classifiers to set of real world data set [9]. Several machine learning techniques are used were proposed to solve the diverse condition that affect divorce. In this paper it explains the hybridization technique presented the KNN algorithm for the classification combined with PSO for future classification [10].

II. Material and the Methodology

The irrelevant and redundant features of the technique are explained in this paper. KNN based technique for the divorce data is explained. The architecture of this technique is explained in the below mentioned figure. The data can be divided into the 10 parts so that

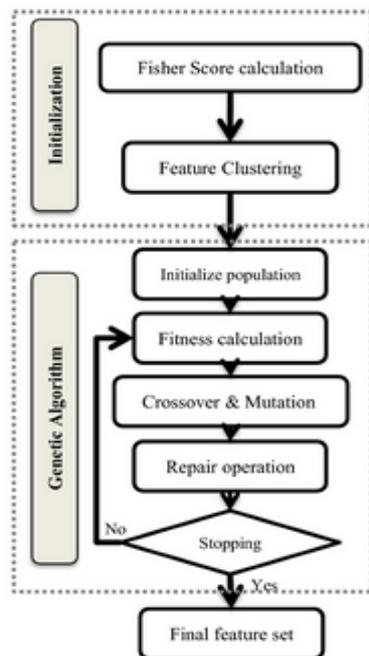
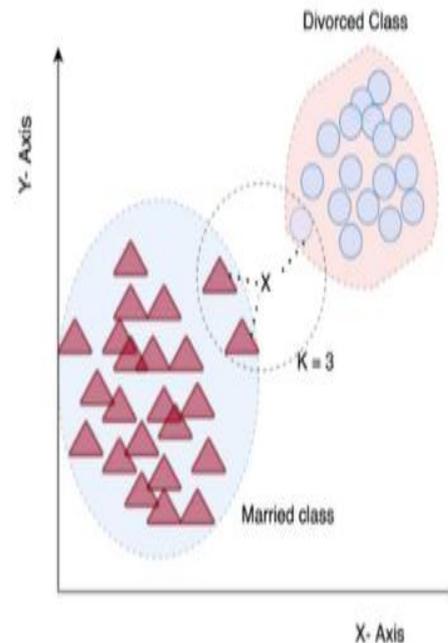


Fig. 1. PSO- based Attributes selection technique for the KNN and characteristic for the divorce dataset.

Main steps for this PSO based technique is shown below:

1. By using the initial problem we can generate the initials particles randomly.
2. We have to first measure the fitness of every individual in the population.
3. Velocity value for each particle must be calculated.
4. After calculation of the velocity we have to construct a solution so that each particle should move to the next part.
5. if there exist a number of iterations then we have to stop the process and get return to the step 2.

classification can get easier. All the parts of the data set are equally divided for example divorce and the training set etc. and the other part is used for the testing of the model. This technique is used again and again for the learning and testing. By the help of this technique we can guarantee that all parts are used in both the stages.



Conclusion

There are lot of technologies to determine the data set fir the divorce data but by the help of this technique it helps the users to decide the winning or the losing probabilities of the case various researches have been done on this topic but this paper shows the comparative and characteristic analysis of the various technique and machine learning technique on the domain of the law. This paper also shows the best result which we can attain by the help of the machine learning technique. The outcome can be improved as compare to the commonly used supervised machine learning techniques.

References

- [1]. A. Farzindar and G. Lapalme, “ Letsum an automatic Legal Text summarizing

system”, legal knowledge and information system, JURIX, 2004.

[2]. H. Surden, “Machine learning and law,” Wash. L. Rev. pp. 89-87, 2014.

[3]. J.L. Hallerstein, T. S. Jayram and L. Rish, “ Recognising end user transaction in performance management “, IBM Thomas J. Watson research Divison, Howthorne NY, 2000.

[4]. M. Sahami, S. dumais, D. Hackerman and E. Horvitz, “A Bayesian approach to filtering junk e-mail” , learning for text categorization: papers from the 1998 workshop, vol. 62, pp. 98-105, 1998.

[5]. M. Langarizadeh and M. Fateme, “Applying naive Bayesian networks to disease prediction: a systematic review”, Acta information Medica, vol. 24.5, 2016

[6]. D. Kalita,” Supervised and unsupervised document classification: A Survey”, International Journal of computer Science and information technologiews, 2015.

[7]. R. Benkhelifa and FZ laalllam, “Facebook post text Classification to improve information filtering,” WeBIST, no. 1. 2016.

[8]. C. Grover, B. Hachey and C.Korisinsky, “summarizing legal texts: sentitial tense and argumentative roles,” proceeding of the HLT-NAACL 03 on text summarization workshop 5, Association for computational linguistics, 2003.

[9]. C.R. Stephens, H.F Huerta and A.R Linares, “ when is the naïve bayes approximation not so naïve,” Machine learning, vol, no. 107, no. 2, pp. 397-441, 2018.

[10]. Abdallah Imad. V. Dertimanis, H> maylonas , K tatsis, E. chatzi, N. Dervillis et.al, “Fault diagonals of wind turbine structure using decision tree learning algorithms with big data,” safety and reliability safe societies in a changing world, pp. 3053-3061, 2018.